webcamXP 5

User Manual

revision 1.3

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Versioning

Version	Date	Author(s)	Comments
1.0	22/08/2008	Donald Campbell	Initial release
1.1	24/08/2008	Steve Niquille	Corrections + missing chapters
1.2	26/08/2008	Donald Campbell	Additional Corrections and FInalizations
1.3	28/08/2008	Steve Niquille	Final corrections

1 Installing webcamXP

The following sections contain instructions on installing and configuring webcamXP for initial operations.

1.1 webcamXP Pre-Requisites

Before installing webcamXP, install Microsoft DirectX9 and Windows Media Player. webcamXP supports Windows Media Player versions 9, 10, and 11.

Note on Windows Media Player Installation for Microsoft Windows 2008: If you run Microsoft Windows 2008, you must install Windows Media Player using the following steps:

1. Navigate to the **Features** window by going to **Server Manager > Features**.
2. Click on **Add Feature**.
3. Select **Desktop Experience** from the list and click **OK**.

Some users may also need to install FFDShow. FFDShow is an encoder application used to write MPEG file formats. Some computers will require FFDShow to successfully play and encode using the MPEG-4 format. Most computers **without professional video editing software** will require FFDShow in order to create MPEG-4 (.mpg) files.

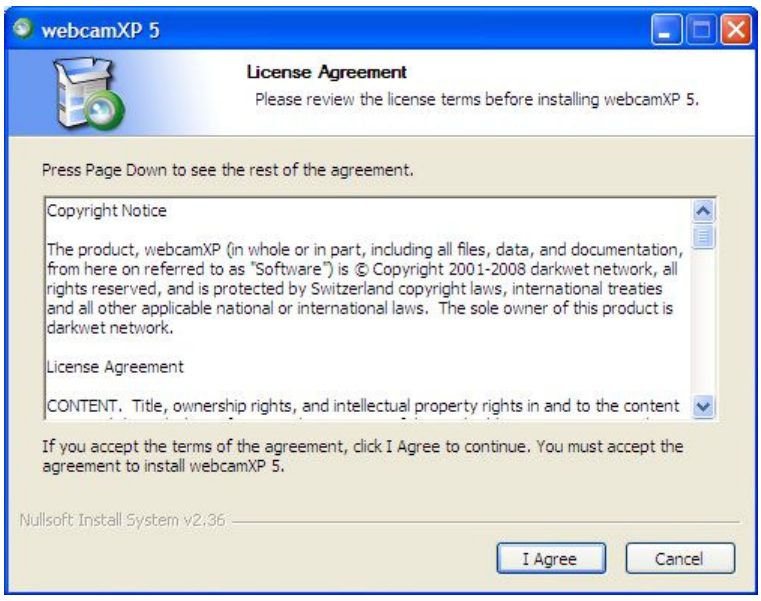
To download and install FFDShow, visit the FFDShow website:

http://www.free-codecs.com/download/FFDshow.htm

Follow on-page instructions on downloading and installing the application.

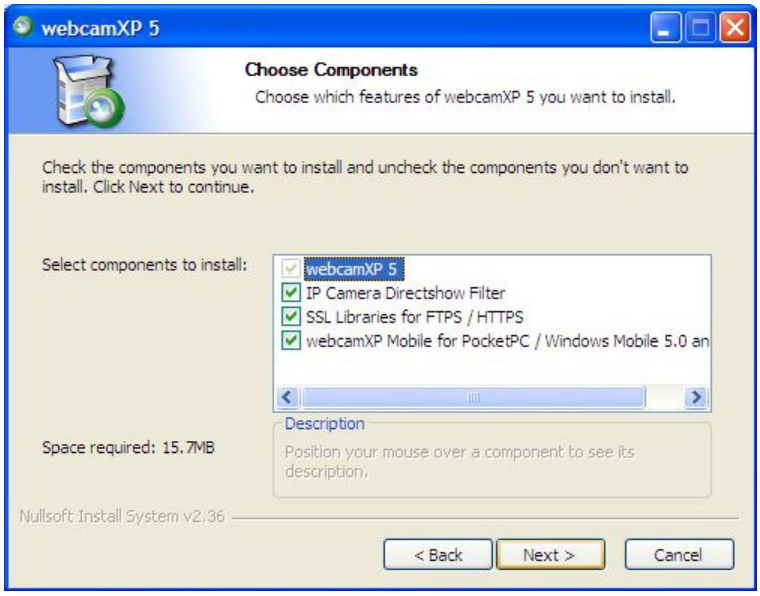
1.2 Installing webcamXP

Double-click on the wLite.exe installation program. The Installation Wizard will execute:


webcamXP 5
License Agreement
Please review the license terms before installing webcamXP 5.
Press Page Down to see the rest of the agreement.
Copyright Notice
The product, webcamXP (in whole or in part, including all files, data, and documentation, from here on referred to as "Software") is © Copyright 2001-2008 darkwet network, all rights reserved, and is protected by Switzerland copyright laws, international treaties and all other applicable national or international laws. The sole owner of this product is darkwet network.
License Agreement
CONTENT. Title, ownership rights, and intellectual property rights in and to the content
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install webcamXP 5.
Nullsoft Install System v2.36
I Agree
Cancel

Click the **I Agree** button to agree to webcamXP's terms and conditions for use.

In the next window, select the products you wish to install:

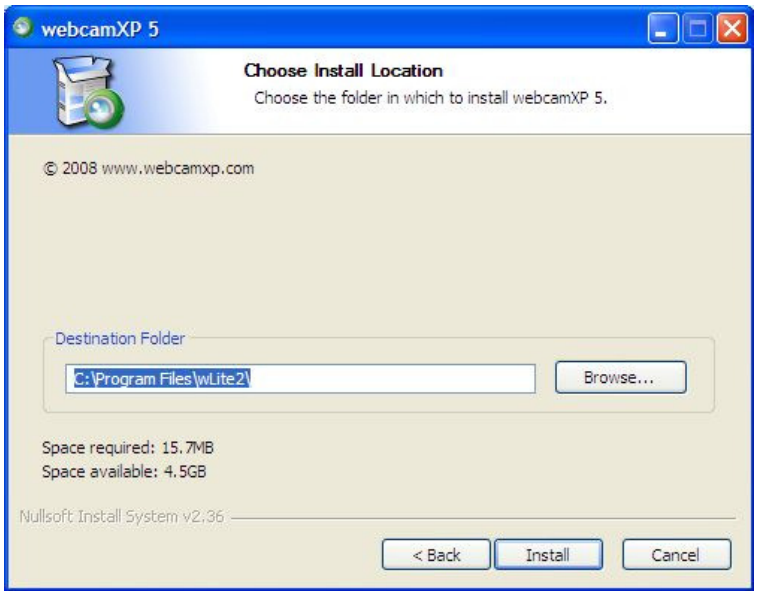

webcamXP 5
Choose Components
Choose which features of webcamXP 5 you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
webcamXP 5
IP Camera Directshow Filter
SSL Libraries for FTPS / HTTPS
webcamXP Mobile for PocketPC / Windows Mobile 5.0 an
Description
Position your mouse over a component to see its description.
Space required: 15.7MB
Nullsoft Install System v2.36
< Back
Next >
Cancel

The following options are available:

- **IP Camera Directshow Filter:** Check this if you wish webcamXP to use a Directshow filter to clean up the motion and data coming from a network (or IP camera). Directshow filters can be customized by advanced users.
- **SSL Libraries for FTPS / HTTPS:** Check this box if you would like to install security options for secure FTP and secure HTTP transfers.
- **webcamXP Mobile for PocketPC:** Check this box if you would like to install the webcamXP mobile application for use on your Windows Mobile-enabled device.

Click the **Next >** button to continue.

In the next step, specify your installation directory (by default, C:\Program Files\wLite):



Click the **Install** button to begin installation.

When installation is complete, you will be taken to the following screen:

If you would like to launch webcamXP immediately, check the **Launch webcamXP 5 Now?** checkbox. Click the **Finish** button to finish installation.

2 webcamXP Versions and Features

2.1 webcamXP Free

webcamXP Free is a partial-featured version of the full webcamXP PRO program. It allows users to connect one camera (be it USB/PCI or Network) at a time. Also, the free edition of webcamXP disables Access Restrictions and Security features.

2.2 webcamXP Private

webcamXP Private is a cut-down version of the webcamXP 5 software. It includes all the functionality to monitor, add/edit/delete, and secure camera images from up to 5 video sources. It lacks, however, the security features (motion detector, DVR) and advanced features such as remote administration available on the full webcamXP PRO version.

2.3 webcamXP PRO

webcamXP PRO is fully-featured and provides the ability to connect an unlimited number of cameras (USB/PCI and Network) at once. webcamXP PRO also features a full list of Broadcast features, including hosting of an Internet-based portal (HTTP Broadcasting) and automatic HTTP and FTP uploads (for hosting still images and videos on foreign servers). With HTML Code generation, webcamXP PRO users can easily integrate their array of surveillance cameras with their existing websites.

webcamXP PRO provides the ability to secure access to your cameras by allowing the creation of user accounts and passwords.

2.4 webcamXP Features Chart

	webcamXP Free	**webcamXP Private**	**webcamXP PRO**	**webcamXP PRO Trial**
Supports	1 source	5 sources	unlimited sources	unlimited sources
Supports all USB / PCI devices and IP based sources	✔	✔	✔	✔
Local and remote pan, tilt and zoom control for compatible devices (USB / IP Cameras)	✔	✔	✔	✔
Integrated chat system	✔	✔	✔	✔
Multiple client viewing options (java / javascript / flash client)	✔	✔	✔	✔
HTTP broadcasting	✔	✔	✔	✔
Windows media streaming and WM9 profiles handling (including for IP Cameras)	✔	✔	✔	✔
FTP / FTPS Uploading	✔	✔	✔	✔
HTTP / HTTPS Post uploading	✔	✔	✔	✔
Capturing and recording features (including IP Cameras / ASF streams)	✔	✔	✔	✔
Integrated scheduler for daily or fixed interval tasks	✔	✔	✔	✔
Displays country of the connected users	✔	✔	✔	✔

	webcamXP Free	webcamXP Private	webcamXP PRO	webcamXP PRO Trial
Use as source / relay / recompress and watermark ASF (Windows Media) streams	✔	✔	✔	✔
Use IP Camera Filter in webcamXP	✔	✔	✔	✔
Password protection / users accounts management		✔	✔	✔
Logo change / disable		✔	✔	
Customize webpage title / look		✔	✔	
Motion detector + alerts manager			✔	✔
Acoustic detector			✔	✔
DVR (permanent recording auto-erased after X hours)			✔	✔
Detailed log files of activity			✔	✔
Use IP Camera Filter in any application			✔	

3 The Three Modes of webcamXP

3.1 webcamXP 5 [normal mode]

The default webcamXP mode can be accessed using the **webcamXP** icon (created on the Desktop during webcamXP install). It is not optimized for any one particular method of camera data representation but should cover the needs for most users.

The standard webcamXP version is ideal for the user who does not wish to favor any one technology, and therefore does not want to optimize or customize camera output to fit any one representation paradigm.

3.2 webcamXP 5 [IP Camera optimized]

webcamXP ships with a version customized and optimized for use with IP or Network cameras. This version of webcamXP does not use Microsoft DirectShow for IP Cameras.

Note: It is not possible to record video from IP Camera sources, unless the DVR feature is utilized.

Network cameras can also be connected using the default webcamXP mode and the DirectShow filter. The DirectShow filter allows recording of videos using a third-party codec.

3.3 webcamXP 5 [Windows Media]

Windows Media is a streaming format useful for smooth representation of connected camera data. It can be utilized when broadcasting audio and video over the web (HTTP, see section on HTTP Broadcasting).

webcamXP provides a special mode that automatically enables Windows Media streaming.

Windows Media streaming allows broadcasting of both audio and video data over a network. Without Windows Media streaming, audio transfer over a network is not possible.

Combined with our powerful IP Camera Directshow filter, webcamXP is one of the rare software which allows to stream IP Cameras in Windows Media.

To access this mode, simply double-click on the **webcamXP [Windows Media]** icon. This icon should have been created on your system's desktop during webcamXP installation.

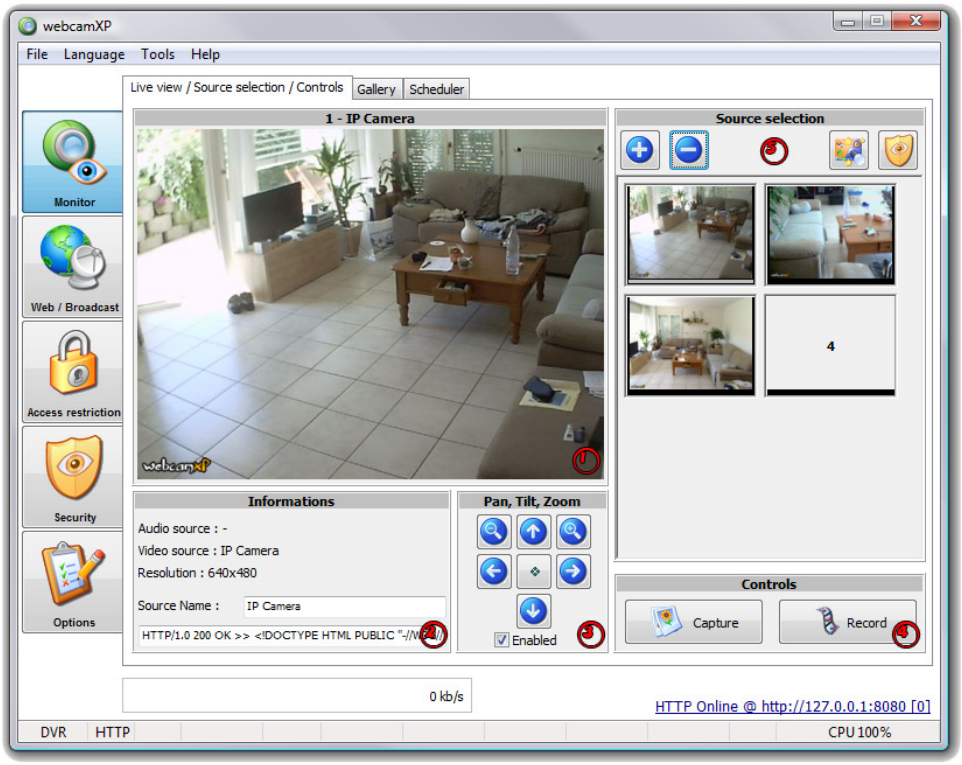
4 webcamXP Monitoring

4.1 Live View / Source Selection / Controls

webcamXP allows you extensive control over their surveillance needs. The default tab, **Live View / Source Selection / Controls**, allows you to add and remove cameras (sources), view the data streaming live from their connected sources, and edit connected sources (by panning and zooming).

Also, the **Live View / Source Selection / Controls** tab allows you to keep records of data streaming from connected sources in the form of .JPG stills and recorded movies.

Shown below is a screenshot of the **Live View / Source Selection / Controls** window:



The window is divided into various boxes:

- **Camera Display Box (1):** This box displays the images streaming from the currently-selected camera.
- **Source Selection (2):** All the cameras (sources) webcamXP has access to are listed in the **Source Selection** box. Sources can be added by clicking on the **+** button at the top of the **Source Selection** box. Sources can be removed by clicking on the **–** button at the top of the **Source Selection** box. In order to select a source and begin monitoring its streaming data, simply click on the source's thumbnail image.
- **Information Box (3)**: The information box provides vital data on the selected camera (the camera currently being shown in the **Camera Display Box**). Included in the **Information** box is the name of the device providing audio (if audio is connected), a description of the type camera (IP Camera designates the camera is being shared as a network camera), its resolution, and a description of the camera itself (usually a manufacturer and model name).
- **Pan, Tilt, Zoom Box (4)**: This box provides movement controls for the camera selected (the camera currently being displayed in the **Camera Display Box**). Depending on the camera model and capabilities, you may be able to zoom (using the magnifying glass icons), pan (move the camera right

or left), or tilt (move the camera up or down). If you wish to move the camera back to its original location, click on the center diamond-shaped button.

- **Controls Box (5):** The controls box provides two options: **Capture** and **Record**. The **Capture** option allows you to take a still image (a still frame) from the currently-selected camera. The still frame is stored as a .JPG file on your hard drive. **Record** allows you to record a snippet of the selected camera's output, and store it as a movie on your hard drive.

The following sections provide details on the various functions you can perform within the **Live View / Source Selection / Controls** tab:

4.1.1 Connecting a New Camera Source

A source, or camera, can be of multiple types. The first, most straight-forward connection is the USB or PCI camera. USB/PCI cameras are cameras that are directly connected to the computer running webcamXP using either a USB or a PCI connection.

Cameras can also be connected over a network. Various tools, including webcamXP, can share the data from a camera over an HTTP network. webcamXP can then connect to these hosted cameras, allowing you to view the camera's images and control its options (through zoom or pan).

Finally, additional sources can be connected and viewed in webcamXP alongside USB/PCI and Network cameras. WMV or MPEG movies, hosted either on the machine running webcamXP, or over an HTTP network, can be added and viewed in the **Live View / Source Selection / Controls** tab.

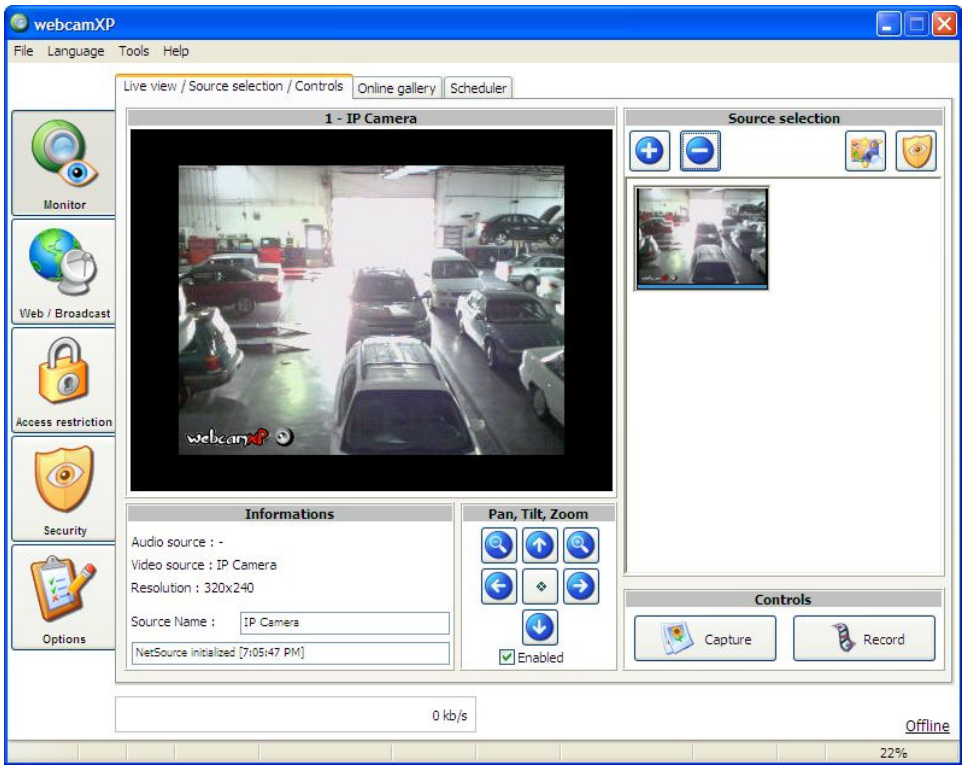
In the following subsections, the various steps to connecting a USB/PCI camera, Network camera, and WMV/MPEG movie are detailed.

4.1.1.1 Connecting a New USB/PCI Camera

In order to connect a USB or PCI camera, begin by connecting the camera to your computer. Use the manufacturer's installation disk to download and install the necessary drivers for your camera. If your camera did not ship with an installation disk, the manufacturer may provide the necessary drivers on its website.

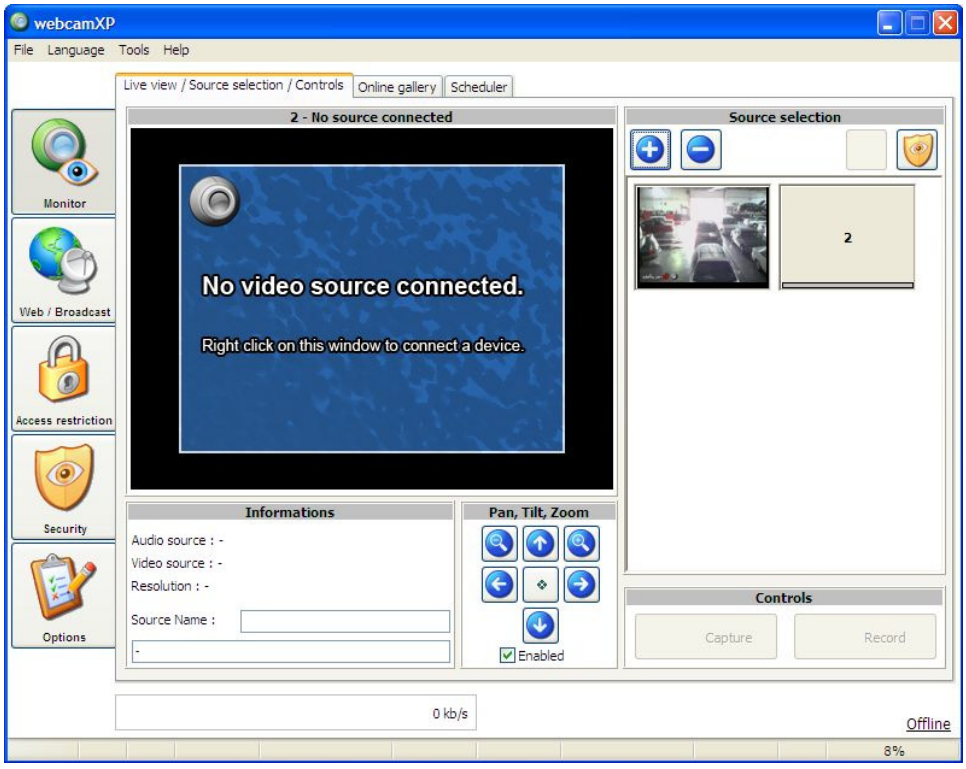
For additional information on how to install and configure your camera, please see the camera's included instructional manual or online documentation.

Once the camera is installed, load webcamXP. By default, you will be taken to the **Live View / Source Selection / Controls** tab:



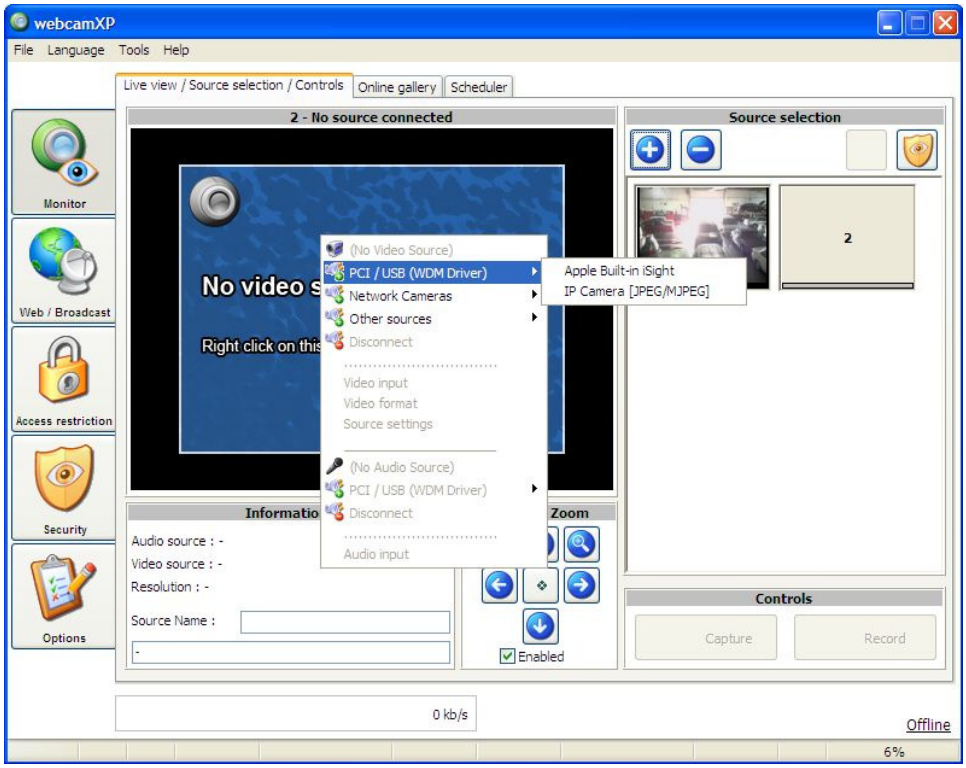
In the above example, one camera has already been connected to webcamXP.

To begin connecting a new camera, first click on the **+** button, located at the top of the **Source Selection** box. This will create a new space for a camera connection:



The new space, labeled in the example above as space "2", will display a blank gray image. Select this new space in the **Source Selection** box. The **Camera Display** box will display an error message "No video source connected."

Right-click in the blue space in the middle of the **Camera Display** box. The following menu will display:



Select the **PCI / USB (WDM Driver)** option. If your camera was successfully installed, it should be listed in the submenu that appears. Select your camera from the list. In the above example, the computer has an Apple iSight camera available.

4.1.1.2 Connecting an IP Camera

In order to connect a network camera, you must know a few details about the camera. First, you must know its manufacturer (e.g. Panasonic, Sony, etc.)

Next, you must know the HTTP URL or IP address on which the camera is being hosted (e.g. you must now the camera's address for access). Examples may be http://www.mywebsite.com:8002 or http://192.168.0.103:8023.

You must also know the port to which it is connected. You can decipher the port by studying the URL. A URL is fashioned using one the following template:

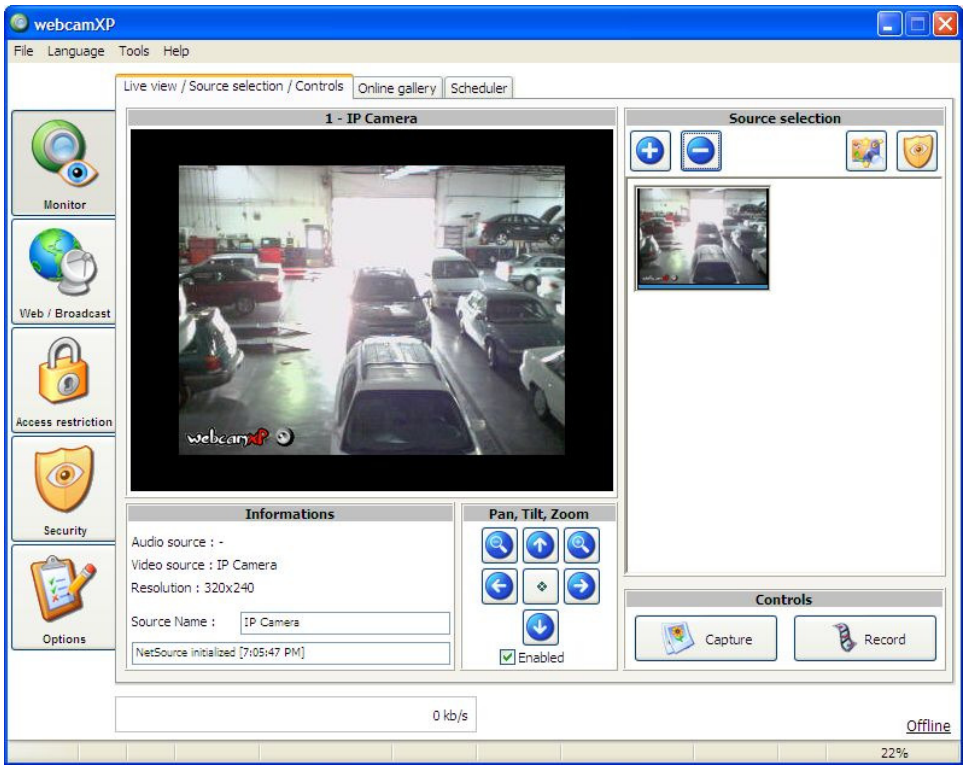
http://www.[urlname].com:[port]
http://[IP Address]:[port]

In the above examples, the URLs include the ports 8002 and 8023. If no port is defined (as with the URL http://www.mywebsite.com), the camera is connected to the **default port** 80.

You must also know some optional settings about the camera, including the camera's number (if multiple cameras are being shared over one URL). You must also know if the camera is password protected. If the camera is password protected, you must have a correct username and password.

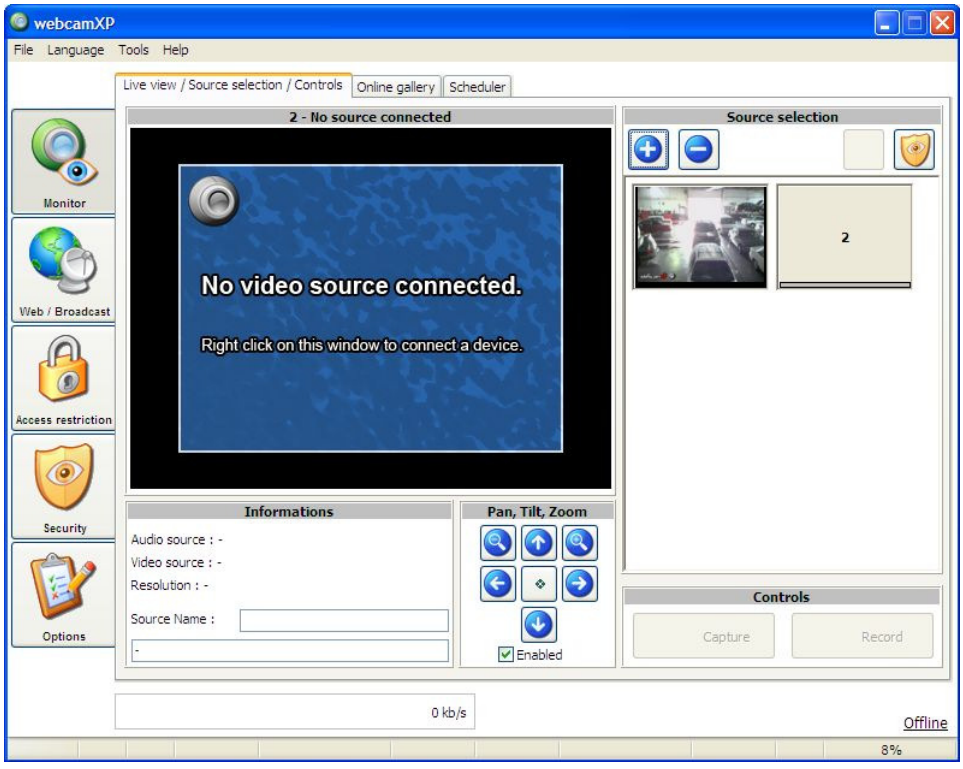
If you wish to customize the display of the camera and know its technical specifications, you may wish to record the camera's output resolution and maximum frame rate. This data can be found by contacting the camera's system administrator or by reading the technical documentation provided by the camera's manufacturer.

Once you know the camera's URL and port, load webcamXP. By default, you will be taken to the **Live View / Source Selection / Controls** tab:



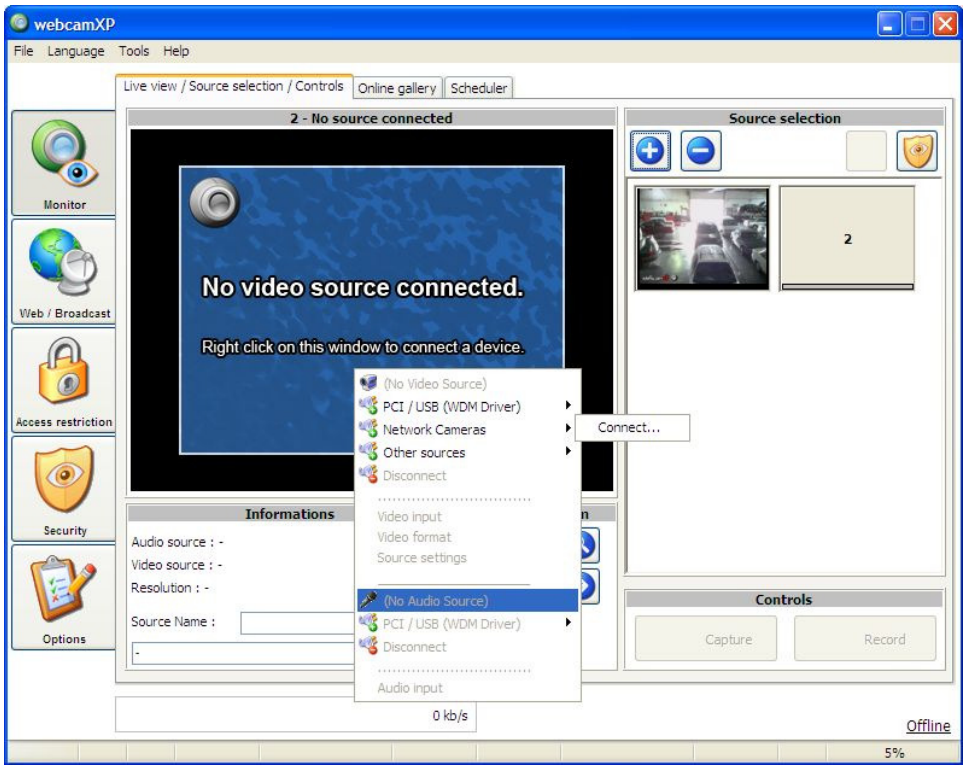
In the above example, one camera has already been connected to webcamXP.

To begin connecting a new camera, first click on the **+** button, located at the top of the **Source Selection** box. This will create a new space for a camera connection:



The new space will appear as a gray block in the **Source Selection** box. Click on the gray block. The **Camera Display** box will show an error message, "No video source connected."

Right-click in the middle of the **Camera Display** box. The following menu will appear:



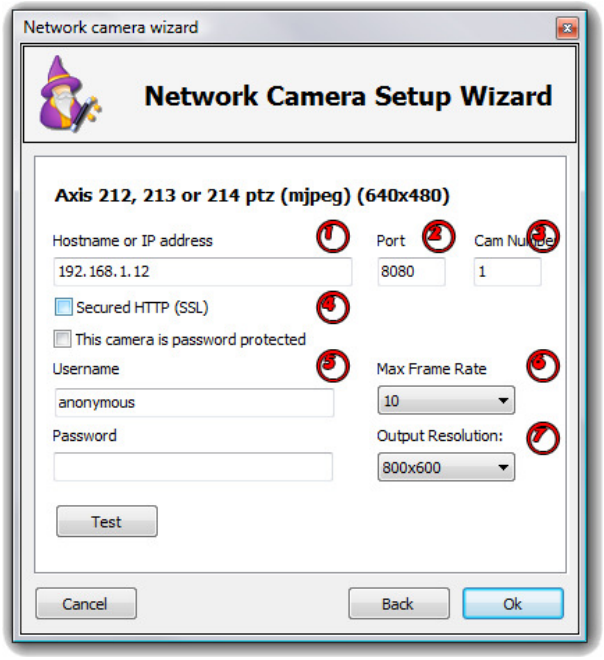
Select **Network Cameras > Connect...**

The following screen will appear:

Select your camera's manufacturer from the **Camera Brand** drop-down box. If you know the camera's specific model number, you may select it from the **Camera Model** drop-down. If you are unsure of the camera's model number, simply select "Network Camera" from the **Camera Model** drop-down.

Note: Some cameras are designed for use with Microsoft Media Streaming, and therefore do not appear in the **Camera Brand** or **Camera Model** drop-down boxes. An example is the Linksys WCG54. In order to connect a Linksys camera, see the section **Connecting Cameras from Other Sources**. Select **ASF Stream** and enter the URL of the Linksys IP Camera into the textbox.

Click the **Next** button. The next step in the wizard will appear:



Enter the URL or IP address of you camera in the **Hostname or IP Address** box. There is no need to include the http:// prefix of the URL or IP Address. Enter the camera's port number in the **Port** textbox, and specify the camera's number in the **Cam Number** box. If you are unsure of the camera's number, enter "1" in the **Cam Number** textbox.

If your camera's URL contains https:// as a prefix, this indicates the camera is hosted on secure HTTP connection. Check the **Secured HTTP (SSL)** checkbox.

If your camera is password protected, check the **This camera is password protected** checkbox, enter your username in the **Username** textbox, and enter your password in the **Password** textbox.

If you know the camera's performance data, select its maximum frame rate from the **Max Frame Rate** drop-down box, and select its optimal output resolution from the **Output Resolution** drop-down box.

Click the **Test** button to test your connection. If your connection information (e.g. the camera's URL, port, username, and password) are correct, you will be presented with the following success message:

Click the **OK** button to confirm addition. Please note that depending on the speed of your Internet connection, it may take a few seconds for the network camera to begin transmitting data.

4.1.1.3 Connecting Cameras from Other Sources

Cameras can be connected to webcamXP that are not IP Cameras, and are not USB cameras connected directly to the computer. MPEG files can be imported into webcamXP and treated as if they were full-fledged cameras. webcamXP can also import camears that are set up as MPEG or WMF (Windows Media Format) buffering.

All of these additional source types require files to be present on the machine running webcamXP. To import these files, you simple need to point webcamXP to the right location.

To load a camera from a source other than IP / Network or USB, right-click in the **Source selection** box. In the sub-menu that appears, place your cursor over the **Other sources** option. The following sub-menu will appear:

4.1.2 Connecting Cameras from Other Sources

Note: webcamXP accepts any DirectShow-enabled filter. Third-party filters can therefore be used to connect cameras in webcamXP. For example, VH Screen Capture can be enabled by downloading the required plugin from www.webcamxp.com. Select **Download Addons / Tools**.

Select the source of your additional camera. You may select from one of the following options:

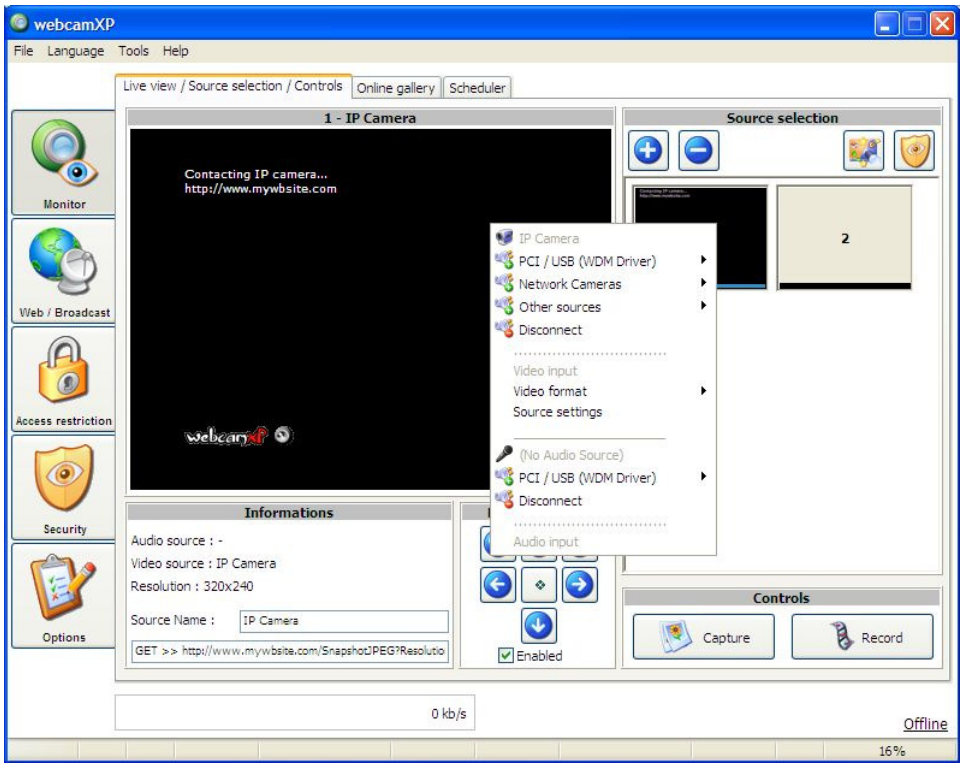
- **Local File (AVI / MPEG):** Select this option to import an AVI or MPEG movie file. Once imported, the file will be shown in the camera display window as if it were a live camera connected to the webcamXP computer.
- **Local File (WMV):** Select this option to import a Windows Media Format (WMV) file. Once imported, the file will be shown in the camera display window as if it were a live camera connected to the webcamXP computer.
- **Network file...**: Select this option if you would like to import an AVI, MPEG, or WMV file into webcamXP that is not hosted on the machine running webcamXP (i.e., it is located on a network shared drive).
- **Network stream (ASF):...**: Select this option if you would like to select a streamed or buffered camera source from the network.

If you selected to import a file, a standard **Open** dialog box will appear. Navigate to and select the file you wish to import. Click the **Open** button.

4.1.3 Disconnecting Camera Sources

To disconnect a camera source, select the camera's tile from the **Source Selection** box.

Right-click in the **Camera Display** box. The following menu will appear:



Select **Disconnect** from the menu. The tile you selected will become gray in the **Source Selection** box.

From this point, you may connect another camera to the previous camera's tile, or remove the tile altogether. To remove the tile completely, select it in the **Source Selection** box and click on the **–** button (located at the top of the **Source Selection** box).

4.1.4 Audio Settings for Cameras

Many USB cameras are equipped with small microphones, providing sound in addition to picture. webcamXP allows you to capture and monitor sound data along with a camera's visual data.

In order to set up the audio services for a camera, you must select the camera's audio driver (usually provided by the manufacturer). Audio drivers can be downloaded from the manufacturer's website, or may be provided on an installation / driver CD shipped with the camera device.

Note: The current release of webcamXP does not support recording of audio from an IP camera. This feature will be available in future releases of webcamXP.

The followings sections will describe the process of specifying an audio driver and configuring audio options for a connected camera.

4.1.4.1 Selecting an Audio Driver / Manager

In order to take in input, you must select an audio driver or manager to handle the audio signal. To specify an audio manager, right-click in the **Source Selection** box. In the menu that appears, you should see webcamXP displaying a "(No Audio Source)" error. Under this error are listed an itemized representation of all the available drivers.

Drivers can be hosted either on the local machine (as with standard microphones or USB microphones), or across the network (if a microphone is being managed and broadcast across multiple computers).

To specify an audio driver, simply place your cursor over the category of audio driver. In the following example, a USB driver is being selected for a microphone that is connected to the local machine using USB.

Once a category for audio drivers is selected, a list of the available drivers will be displayed. **Note:** If no drivers are displayed, make sure that the correct drivers for your microphone are installed. Drivers should be available from an installation CD shipped with the microphone or as a download from the microphone manufacturer's website.

Select the driver that is most applicable to your microphone hardware.

4.1.4.2 Specifying Audio Sources

Once an audio driver is selected (see section above), you must specify the type of input the audio driver will handle. The source or type of audio input determines the strength of the audio signal and thus the volume of the audio signal. webcamXP can take this data from the microphone line (e.g. the data directly form the microphone), the line in volume (specified by the operating system), or a stereo mix between the two. When stereo mix is selected, webcamXP will attempt to find a "happy medium" between the two inputs, returning a volume that accurately portrays the data being read from the microphone device.

To select the audio input type or source, right-click in the **Source Selection** box. Place your cursor over the **Audio Input** option. The following menu should appear:

Select the type or source you wish to use for your audio input.

4.1.5 Panning and Zooming a Camera

Panning and Zooming a camera can be accomplished from the **Pan, Tilt, Zoom** box of the **Live View / Source Selection / Controls** tab. The **Pan, Tilt, Zoom** box is shown below:

First, select the camera you wish to pan, tilt, or zoom by clicking on its representation box in the **Source Selection** box.

If the **Enabled** checkbox in the **Pan, Tilt, Zoom** area is not checked, place a check in it by clicking on it. This entry will make the pan, tilt, and zoom options available to the currently-selected camera.

The magnifying glass icons to the upper right and upper left of the box control zoom functionality. The magnifying glass with a minus (-) sign zooms out. The magnifying glass with the plus sign (+) zooms in.

The four directional arrow keys tilt and pan the camera. The up arrow tilts it up, the down arrow tilts it down, the left arrow pans it left, and the right arrow pans it right.

The center diamond-shaped button returns the camera to its original (and default) position (i.e. it centers the camera).

In order to center the image on a specific location (e.g. shift the camera to focus on a particular region of the image), simply click on that location in the camera's image output box.

4.1.6 Capturing a Still Image from a Camera

To capture a still image, use the **Controls** buttons from the **Live View / Source Selection / Controls** box:

Select the camera you wish to capture a still image from by clicking on the camera's representation in the **Source Selection** box.

Click the **Capture** button from the **Controls** box. A .JPG representation of the camera's current output are saved in your default webcamXP directory.

A pop-up informing you that a capture has been performed and where it has been saved will appear on your system tray (lower right-hand corner of the Windows background).

Note: recording is disabled in IP Camera optimized mode.

4.1.7 Recording Video from a Camera

To capture a video, use the **Controls** buttons from the **Live View / Source Selection / Controls** box:

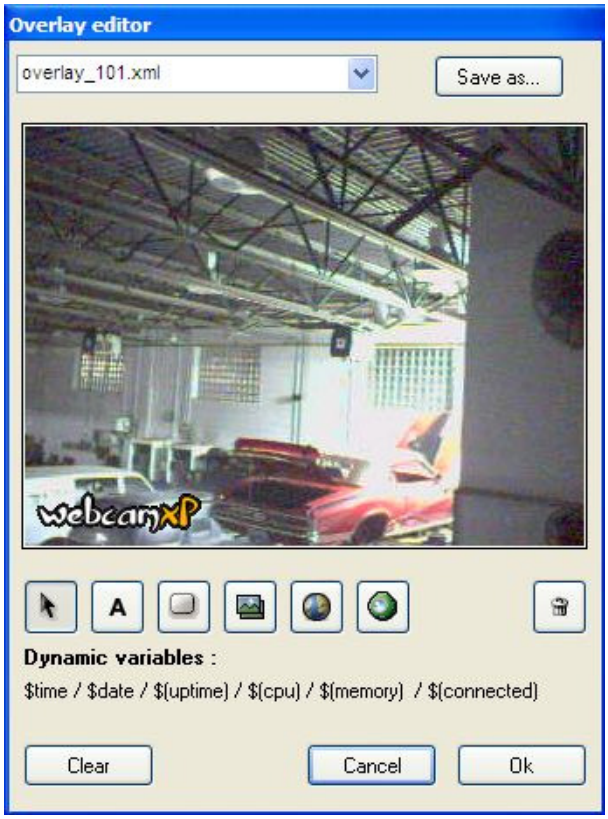
Select the camera you wish to capture a video from by clicking on the camera's representation in the **Source Selection** box. Click the **Record** button to begin recording.

When you wish to stop recording, click the **Record** button again. A .AVI movie file representation of the clip of camera output between the time you first pressed **Record** and the second time you pressed **Record** will be saved within you default webcamXP directory. A pop-up informing you that a video has been taken and where its AVI file was saved will pop-up on your system tray (lower right-hand corner of the Windows background).

4.1.8 Adding a Visual Overlay to a Camera

To add a visual overlay to an image, click the button shown below:

The following window will appear:



In this window, you can declare a series of objects which will be placed over the image from the camera. The overlay information will be stored when video files or still images are captured.

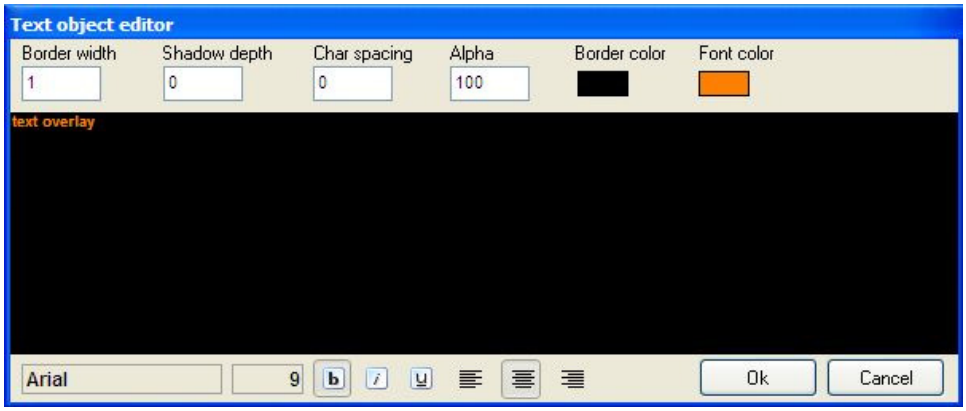
To add objects to your overlay design, use the six buttons located directly under the sample image displayed in the **Overlay Editor** window.

The following sections describe the objects available for addition to your overlay:

4.1.8.1 Adding Text

To add text, click the **A** button, located directly below the sample image in the **Overlay Editor** window. A standard piece of text will appear in the sample image:

Double-click on the new piece of text to edit its contents. The following **Text Object Editor** window will appear:



Enter the contents you wish to appear in the text object in the black box of the **Text Object Editor** window.

You can specify the font of the text by entering a font name in the far-left textbox directly below the black box area. Hit the **Enter** key to make the changes and have them appear in the black box area. You can also specify the size of the text by entering an integer size in the middle textbox at the bottom of the window.

If you wish to use automatically-updated meta information, you can use any of the following variables:

- **$time**: The system's current time.

- **$date**: The system's current date.
- **$uptime**: The amount of time webcamXP has been running at the time the camera with the overlay was accessed.
- **$cpu**: The type of CPU the computer running webcamXP is using.
- **$memory**: The amount of memory the computer running webcamXP has at its disposal.
- **$connected**: The number of users connected to webcamXP at the time the camera with the overlay was accessed.

You can also bold, italicize, or underline the text by clicking on the appropriate button (the three format buttons are located below the black box area).

Alignment of the text (e.g. left-justified, center, or right-justified) can be set using the three alignment buttons at the bottom of the window.

To set a border color for your text, select the colored box directly below the **Border Color** label. To set a font color, click the colored box directly below the **Font Color** label.

The following three additional format options are also available for specification:

- **Border Width:** Enter into this textbox the number of pixels you wish to appear between the edge of the text object and the beginning of the text itself.
- **Shadow Depth:** Enter into this textbox the number of pixels you wish to be used when forming the shadow of the text.
- **Char Spacing:** Enter into this textbox the number of spaces (equal to one strike of the spacebar) you wish webcamXP to add between characters in the text object's contents.
- **Alpha:** Enter into this textbox a percentage (0%-100%) representing the level of transparency. 0% is invisible and 100% is fully opaque.

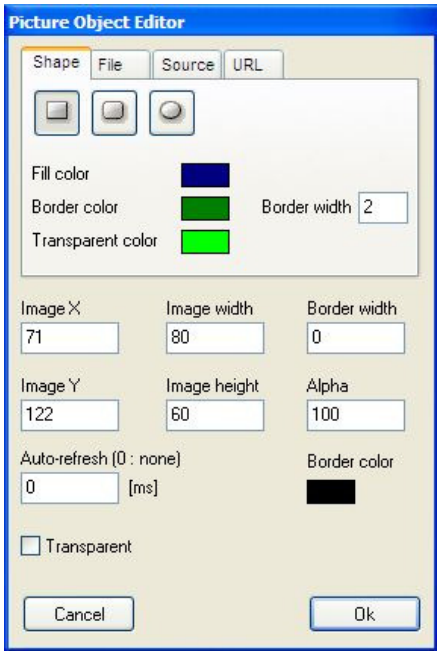
When you have specified all applicable options, click the **OK** button to accept changes.

4.1.8.2 Adding a Shape

To add a shape, click on the **Shape** button. The **Shape** button is the third from the left button, located directly below the camera sample object.

Once the **Shape** button has been pressed, click in the camera sample image box where you wish the upper left-hand corner of the shape to appear (e.g. where you wish the shape to begin).

The following window will appear:



Select the shape you wish to add by clicking on one of the three-available buttons at the top of the window. Available shapes are rectangle (or square) with sharp corners, rectangle (or square) with rounded corners, or oval.

Specify the **Fill color** (the color of the shape's interior), the **Border Color**, and the **Transparent Color** (the color you wish the shape to obtain when its alpha value is decreased and its transparency is increased) by clicking on the colored boxes to the right of each option.

Enter a width for the shape's border by entering a number of pixels in the **Border width** textbox.

The **ImageX** and **ImageY** options are automatically specified by the location of your cursor when you clicked in the camera sample image. Enter a width and height (both in pixels) for the shape by entering values in the **Image width** and **Image height** textboxes.

You can also specify an alpha value by entering a value in the **Alpha** textbox. The alpha value is a percentage (0% - 100%) representing transparency. 0% is invisible while 100% is fully opaque.

Enter a number in the **Auto-refresh** textbox. The Auto-refresh option declares in intervals of how many milliseconds the shape should repaint itself (thus updating on the camera's view). If a value of 0 is entered, the shape will never refresh.

Click the **OK** button to save changes and place your shape on the **Overlay Editor** window.

4.1.8.3 Adding a Local Image File

To add an image to your graphical overlay from an image file from your hard drive, click the **Local Image** button. The **Local Image** button is the button located four from the left directly under the sample camera view. When the **Local Image** button is selected, click in the camera sample box where you wish your local image file's upper left-hand corner to appear (e.g. where you wish the image to begin).

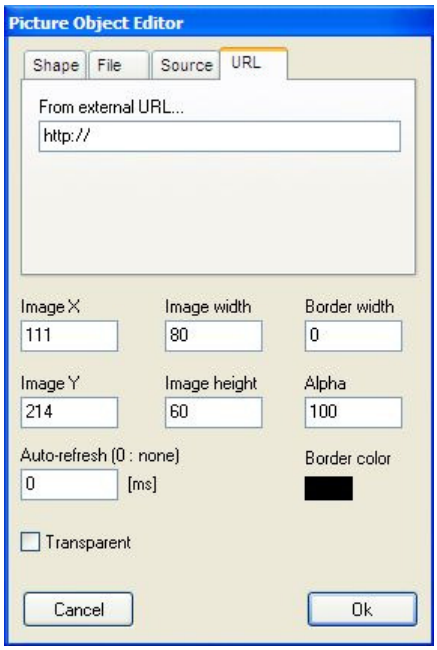
A standard Windows **Open** dialog will appear. Navigate to and select an image file from your hard drive and click the **Open** button.

The new image will appear in the **Overlay Editor** window.

4.1.8.4 Adding a Network Image File

To add an image to your graphical overlay from an image file hosted on your network, click the **Network Image** button. The **Network Image** button is the button located five from the left directly under the sample camera view. With the **Network Image** button selected, click in the camera sample box where you wish your network image file's upper left-hand corner to appear (e.g. where you wish the image to begin).

The following window will appear:



Enter the full URL of the image (including the http:// or ftp:// prefix) in the **From external URL...** textbox. The **ImageX** and **ImageY** textboxes are automatically filled in using the coordinates you specified using your mouse cursor.

Enter the width and height (both in pixels) of the image in the **Image width** and **Image height** textboxes. Also enter a width for your image's border by entering a pixel value in the **Border width** textbox.

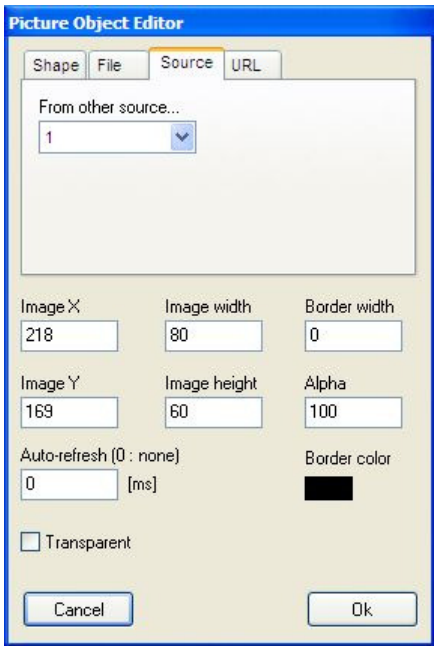
If you wish to apply transparency, enter a non-100 value in the **Alpha** textbox. Alpha values represent a percentage of transparency (0% is invisible, 100% is fully opaque).

Specify a border color by clicking on the colored box directly under the **Border Color** label. Click the **OK** button to accept changes to your image. The image will be placed in the **Overlay Editor** window.

4.1.8.5 Adding a Video Source

To add a video source, click on the **Video Source** button. The **Video Source** button is the last button on the right, located directly under the camera sample image. With the **Video Source** button selected, click in the camera sample image where you wish your video source's upper left-hand corner to be placed (e.g. where you wish your video source to begin).

The following window will appear:



Select the number of the camera you wish to use as your camera source from the **From other source...** drop-down box.

The **ImageX** and **ImageY** textboxes are automatically filled in using the coordinates you specified using your mouse cursor.

Enter a width and height (both in pixels) for your video source by entering values in the **Image width** and **Image height** textboxes. Enter an automatic refresh number in the **Auto-refresh** textbox. The automatic refresh value dictates an interval (in milliseconds) the video source should use when refreshing. After the interval of a specified length is complete, the video source will reset and display its most updated data. If a value if 0 is entered into the **Auto-refresh** textbox, the video source insert will not automatically refresh.

Specify a width (in pixels) for the new video source's border by entering a value in the **Border width** textbox.

Enter an alpha value in the **Alpha** textbox. Alpha values are percentages and dictate transparency. 0% is invisible whereas 100% is fully opaque.

Click the **OK** button to add the new video source and accept changes.

4.2 The Security Center

The security center, shown below, displays a heads-up display of all cameras connected to webcamXP. It provides an excellent way to easily keep track of the data coming from all connected cameras:

To open the **Integrated Security Center** window, navigate to the **Live View / Source Selection / Controls** tab of the **Monitor** section:

The **Integrated Security Center** allows you to display a flexible number of cameras on the screen at once. To select between the modes, click on the **2x2**, **3x3**, or **4x3** buttons, located at the top left-hand corner of the window.

If the number of cameras exceeds the number able to fit in the window at one time, a paging system will be enabled, allowing you to cycle through sets of camera displays. The two arrow keys (located at the top of the **Integrated Security Center** window) allow you to cycle forward and backward through the pages of camera views.

4.3 Online Gallery

4.3.1 What is an Online Gallery?

The online gallery is a space you can set up using webcamXP to display regular still shots from a particular camera or particular cameras. The online gallery is then available to all who have access to your machine (e.g. anyone in your immediate intranet or, if your computer is connected through a static IP address to the Internet, all Internet users).

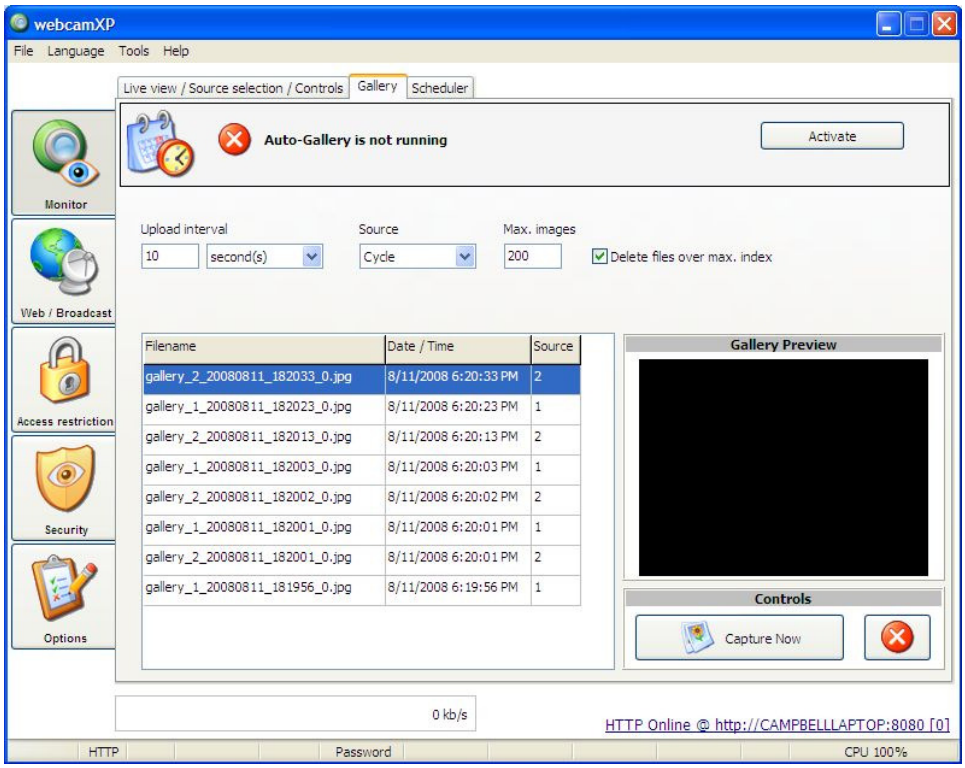
webcamXP can be set up to automatically take a still shot from a selected camera (or cameras) and upload it to your online gallery, providing a stream of images for site visitors to study.

The **Online Gallery** also plugs in to the motion detection security system. webcamXP can be configured to add images from connected cameras to the **Online Gallery** everytime motion is detected.

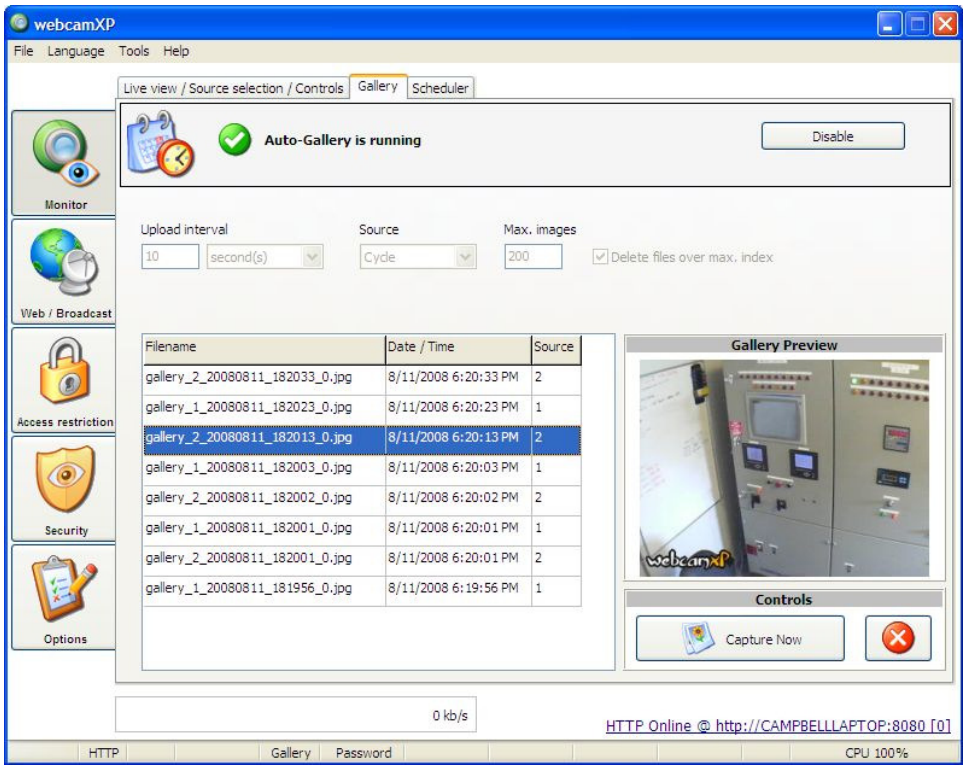
The following sections describe how to set up and administrate an online gallery.

4.3.2 Enabling the Online Gallery

In order to enable the online gallery, first select the **Online Gallery** tab. The following screen will appear:



Click on the **Activate** button to begin running your online gallery. When the online gallery is successfully loaded, the following green check will appear:

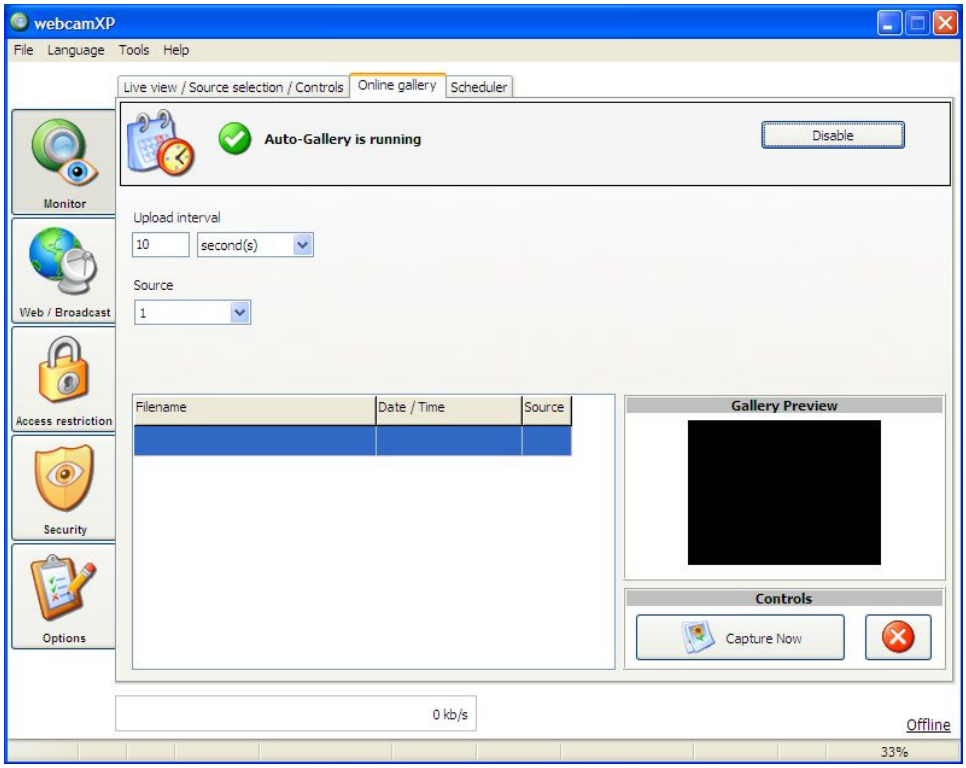


If you wish to stop the gallery from being hosted, simply click the **Disable** button.

The online gallery will take a few seconds to begin uploading your data. In this time, you should begin to customize your gallery by specifying which camera or cameras still shots should be taken from and how often still shots should be taken.

4.3.3 Configuring your Online Gallery

The online gallery tab (shown below) contains a series of options to customize its operation:

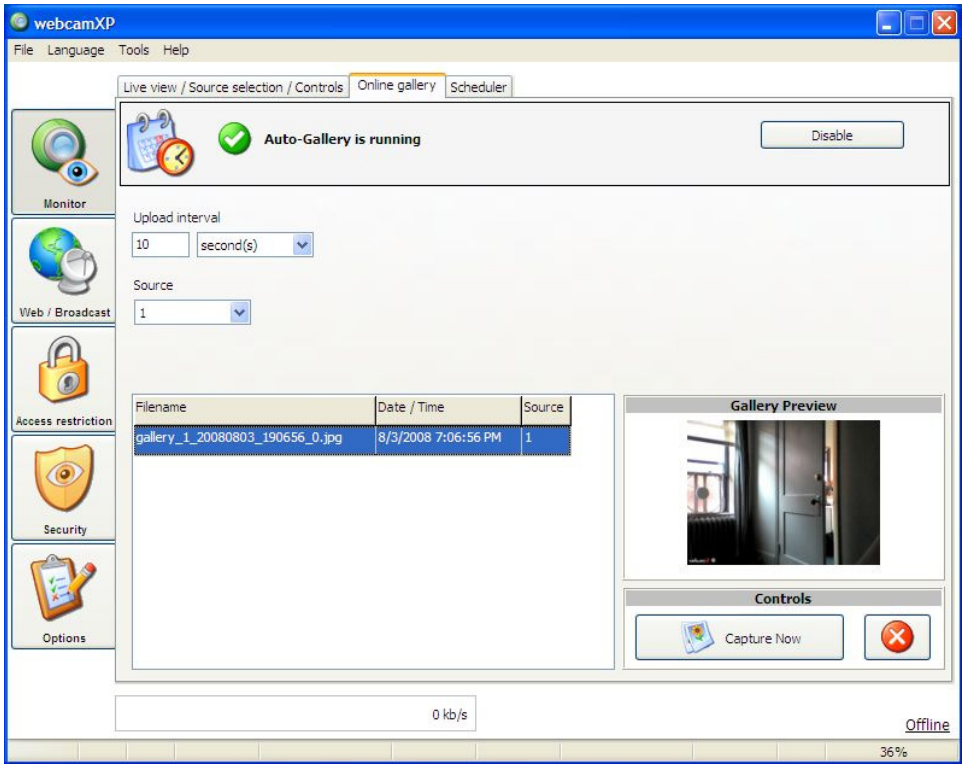


The first option, **Upload interval**, defines how often a new image should be captured from the selected camera or cameras and uploaded to the gallery host. Enter a numerical value in the textbox on the left of the **Upload interval** input, and select a time unit from the drop-down box. In the above example, camera 1 will be captured and uploaded every 10 seconds.

The second option, **Source**, defines which camera or cameras the online gallery should feature. You can select either a camera number (in the above example, 1), or **Cycle**. Selecting **Cycle** will take an image from camera 1, and then take an image from camera 2, and so forth. When the final camera in your source sequence is captured, the system will start again with the first camera and repeat the process.

You may also select the **Capture Now** button. This button forces the system to take a screenshot from the selected camera (or the next camera in the sequence if **Cycle** is selected), and upload the captured image to the gallery host.

Listed at the bottom of the **Online gallery** tab is a list of the files already uploaded to the gallery host. When an image is uploaded, it will appear in the list as below:



If you wish to delete this picture and make it unavailable to online gallery viewers, simply highlight the picture's entry in the list (as above), and click the red **X** button.

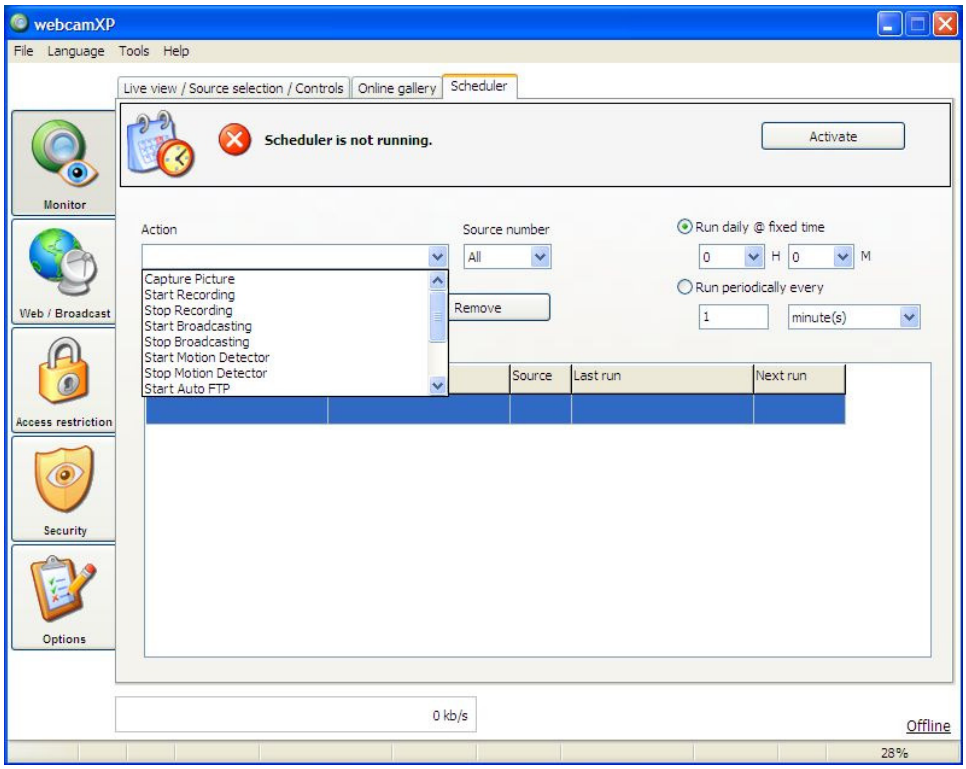
4.4 The Scheduler

The scheduler allows you to set a level of autonomy to webcamXP. Many common tasks can be performed without the direct input of a human operator, and must be performed multiple times a day. For example, you may want a camera to capture and store an image to your hard drive every hour for your records. This would be a tedious job if it required the constant input of a human operator.

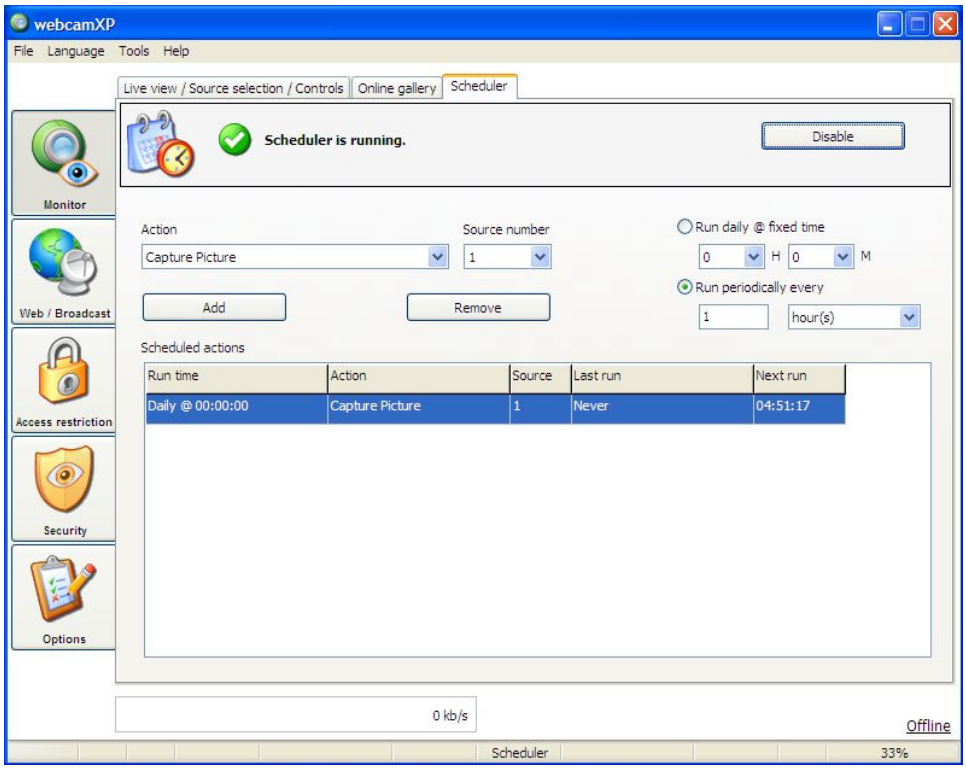
The following sections describe how to set up and customize your scheduler.

4.4.1 Enabling the Scheduler

To enable the scheduler, simply select the **Scheduler** tab in the **Monitor** section of webcamXP. The following screen will appear:

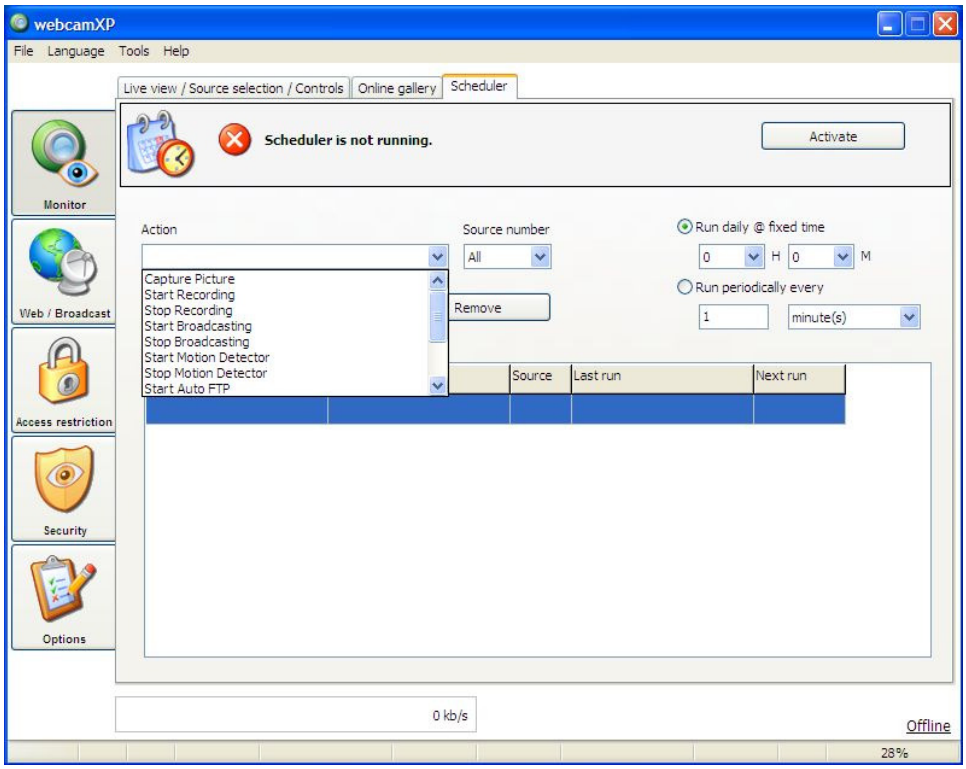


Click on the **Activate** button to begin running the Scheduler. When the scheduler has successfully started, the red **X** icon at the top of the tab will turn to a green check:



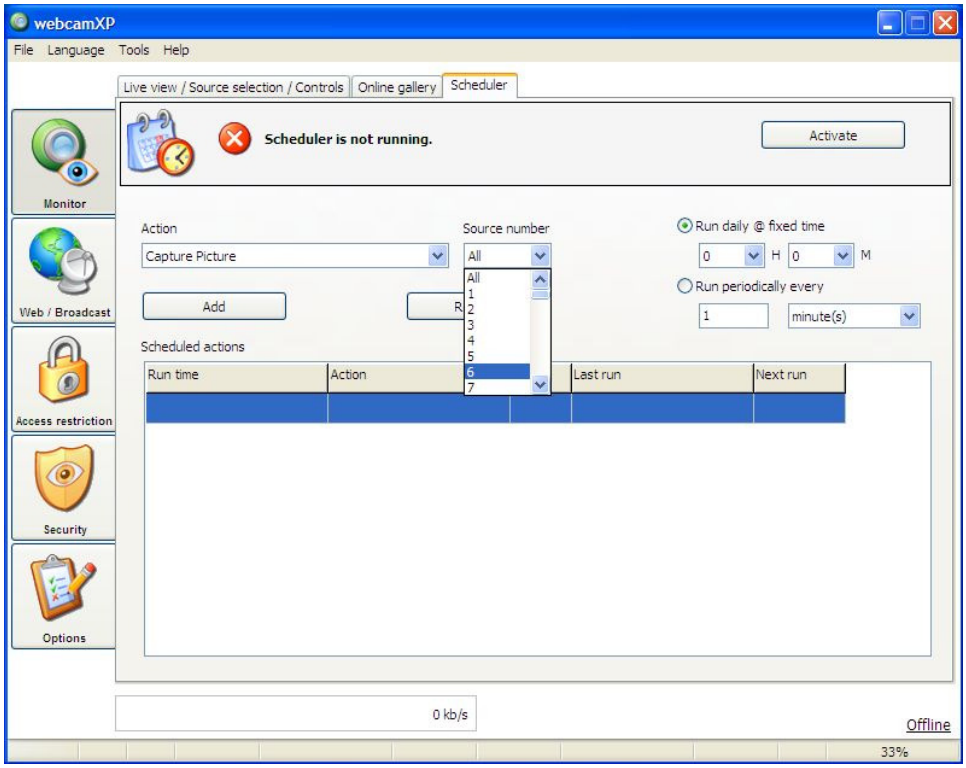
4.4.2 Specifying Scheduled Tasks

In the **Scheduler** tab, select an action to be performed from the **Action** drop-down box:



Sample actions include capturing a picture, begin recording a movie from a camera, stop recording a movie from a camera, start broadcasting your camera's data (over HTTP), end HTTP broadcasting, start motion detection and end motion detection.

Next, select a camera (or cameras) to use as a source (sources). Select this option from the **Source number** drop-down box:



In the above example, the user is selecting to use camera 6 as the source for the scheduler. You may also select **All** from the **Source number** drop-down box if you wish to take scheduler data from all connected cameras.

Next, you must specify how often or at what specific times you wish the action to be performed.

If you wish the action to be performed once daily at a specific, preset time, select the **Run daily @ fixed time** option box. Then, select at what time (in hours and minutes) you wish the action performed from the **H** and **M** drop-down boxes.

If you wish the action performed multiple times per day at even, preset intervals, select the **Run periodically every** option box. Then, enter a numerical value in the textbox and select a time unit from the drop-down box. In the above example, the action's periodical settings are specified to run every 1 minute.

When you are satisfied with the specified options, click the **Add** button to schedule the action.

4.4.3 Removing Scheduled Tasks

In order to remove a scheduled task, simply highlight the action in the **Scheduled actions** list and click the **Remove** button (located directly above the **Scheduled actions** list).

5 Broadcasting and Using the Web

webcamXP gives you the power to share the data coming from your connected cameras to Internet or Intranet users. This property is called Broadcasting. When Broadcasting is enabled, users who know your machine's IP address or website URL can navigate to a custom-designed page and view a streaming representation of your connected cameras.

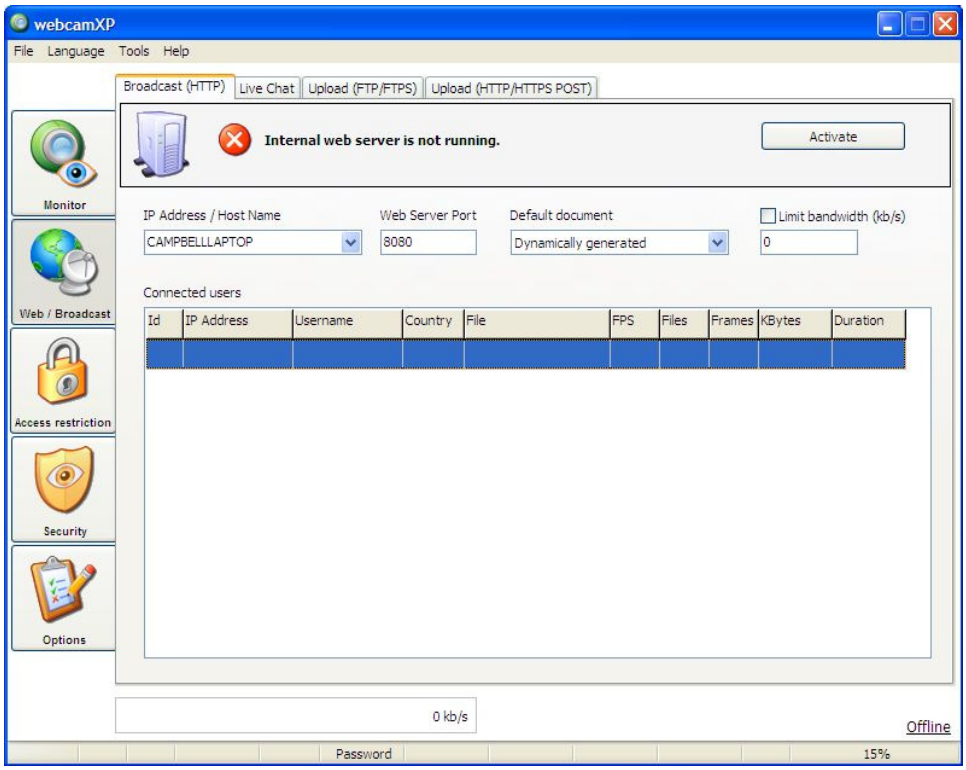
The following sections describe how to enable and customize webcamXP's broadcasting services:

5.1 Broadcasting Over HTTP (Internet Site)

Broadcasting over HTTP is the most common type of Broadcasting, as it turns your machine into an easily-accessible web server. Once enabled, users can access your cameras by simply opening a web browser (e.g. Microsoft Internet Explorer or Mozilla Firefox) and navigating your machine's Internet URL or network IP Address.

5.1.1 Enabling HTTP Broadcasting

To enable HTTP Broadcasting, select the **Broadcast (HTTP)** tab in the **Web / Broadcast** section:



You must specify your computer's host name and the port you wish your cameras broadcast through. If you wish to only broadcast your machine internally (for testing purposes), enter the home IP address (127.0.0.1) in the **IP Address / Host Name** textbox. If your machine is being hosted in the Internet at large, you may have a URL or a domain name associated with your computer (e.g. www.mywebsite.com). If so, enter this domain name in the **IP Address / Host Name** textbox. If you are sharing to an Intranet or you are sharing to the Internet without a domain name, enter your computer's permanent (fixed) IP address (e.g. 274.234.0.1) in the **IP Address / Host Name** textbox.

Enter a port for your machine to broadcast through in the **Web Server port** textbox. The standard HTTP port is 8080. If a user does not specify a port in their URL when navigating to your computer, 8080 is assumed. If you set your **Web Server port** textbox to anything other than 8080, visitors will need to know your port in order to access your camera's displays.

Next, select a default document to display from the **Default Document** drop-down box. The default document declares what HTML file to use when broadcasting your camera's data. This, in turn, declares the look and feel

of the page presented to users who navigate to your computer. If you do not have a preference and want webcamXP to simply design a page for you, select **Dynamically generated** from the **Default Document** drop-down box.

You may wish to limit bandwidth, preventing users from streaming large amounts of data and thus slowing your network. To limit bandwidth, check the **Limit bandwidth (kb/s)** checkbox. In the textbox directly below this checkbox, enter the number of kilobytes (kb) per second (s) you wish to use as a maximum bandwidth allowance.

When all of your settings have been successfully specified, click the **Enable** button to begin broadcasting your camera displays.

5.1.2 Static IP Addresses and Port Forwarding

In order for you to reliably and constantly Broadcast HTTP, you must have a static IP address. Many non-commercial Internet Service Providers (ISPs) do not provide static IP addresses. Each time you login to their service for access to the Internet, you are assigned an IP address that is free and accessible.

If you wish to provide constant hosting or wish to use a Domain Name Service (DNS) to register a domain, you must have a static IP address. Contact your Internet Service Provider (ISP) for more information on static IP addresses.

You must also configure port forwarding. If your computer is connected to the Internet through another computer or through a router, the router must be programmed to pass along all Internet requests (usually on port 8080) to your machine for handling. Each router brand and model has a different procedure for enabling port forwarding. Usually, routers provide web-based administrative interfaces that are accessible by visiting http://192.168.0.1 or http://192.168.1.1 in a standard web browser (e.g. Microsoft Internet Explorer or Mozilla Firefox).

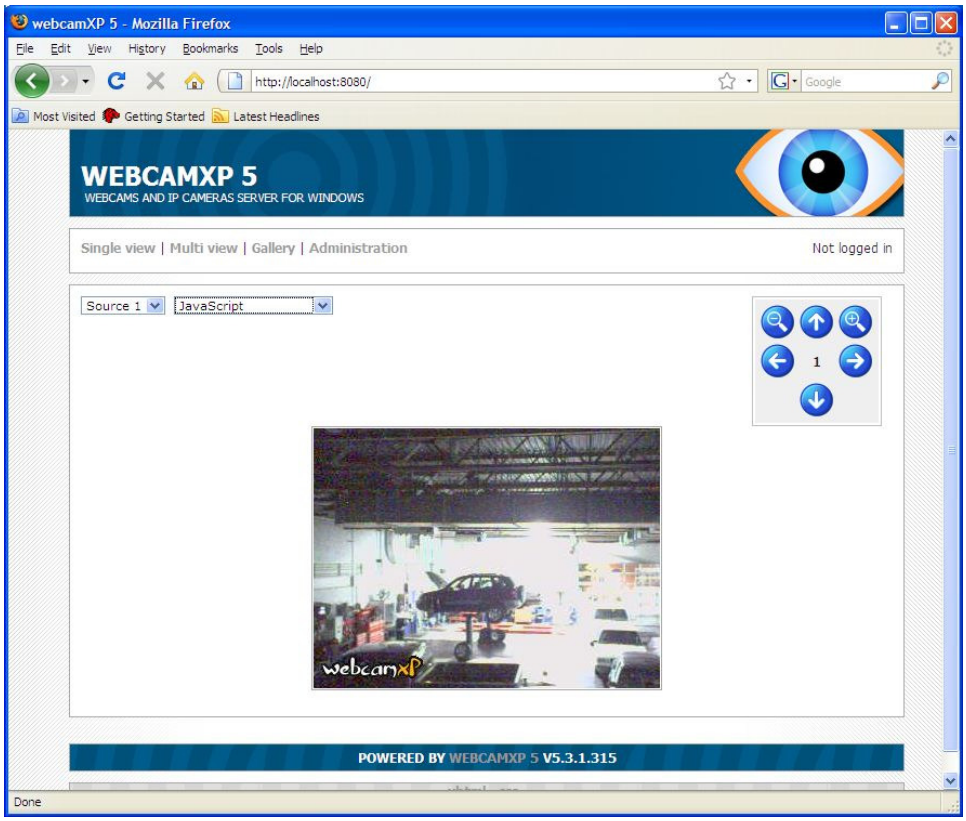
Consult your router's documentation or contact a system administrator for more information on setting up port forwarding.

PortForward.com (http://www.portforward.com) can also provide guidance and instructions on priming your network to support HTTP Broadcasting.

5.1.3 Viewing Your Broadcasted HTTP Site

Once HTTP Broadcasting is enabled, you can test it by viewing it in your favorite web browser. Open your web browser (e.g. Microsoft Internet Explorer or Mozilla Firefox) and navigate to http://localhost:[port] where [port] is the port number you specified when configuring HTTP Broadcasting. If you did not specify a custom port, use the value 8080 for [port].

The following window will appear:



From this main website, you can control your camera (using the four arrow buttons and the two magnifying glass buttons on the upper right-hand corner of the page).

The following sections describe the options available to you when viewing your cameras through your broadcasted HTTP portal:

5.1.3.1 Single View

By default, the **Single view** page is displayed (see previous screenshot). This page provides a direct view of one particular camera. You can switch between cameras by selecting a source from the drop-down box on the upper left-hand corner of the page. In the previous screenshot, the first source (source 1) is displayed.

In **Single view**, you can also control the position, zoom, and movement of the displayed camera. The four arrow buttons (located on the upper right-hand corner of the page) control the camera's position. The right and left arrow buttons control the pan of the camera, and the up and down arrow buttons control its tilt.

The **+** and **–** magnifying glass buttons (located above the right and left arrow buttons) control the camera's zoom.

The display of the camera itself can be rendered in one of three formats:

5.1.3.1.1 JavaScript Display

The first, **Javascript**, is the simplest and most processor-saving method. **Javascript** is supported by most browsers (including Internet Explorer and Mozilla Firefox) without the addition of a third-party add-on. When **Javascript** is selected, the page will regularly refresh, giving the illusion of constant camera movement.

5.1.3.1.2 M-Jpeg Display

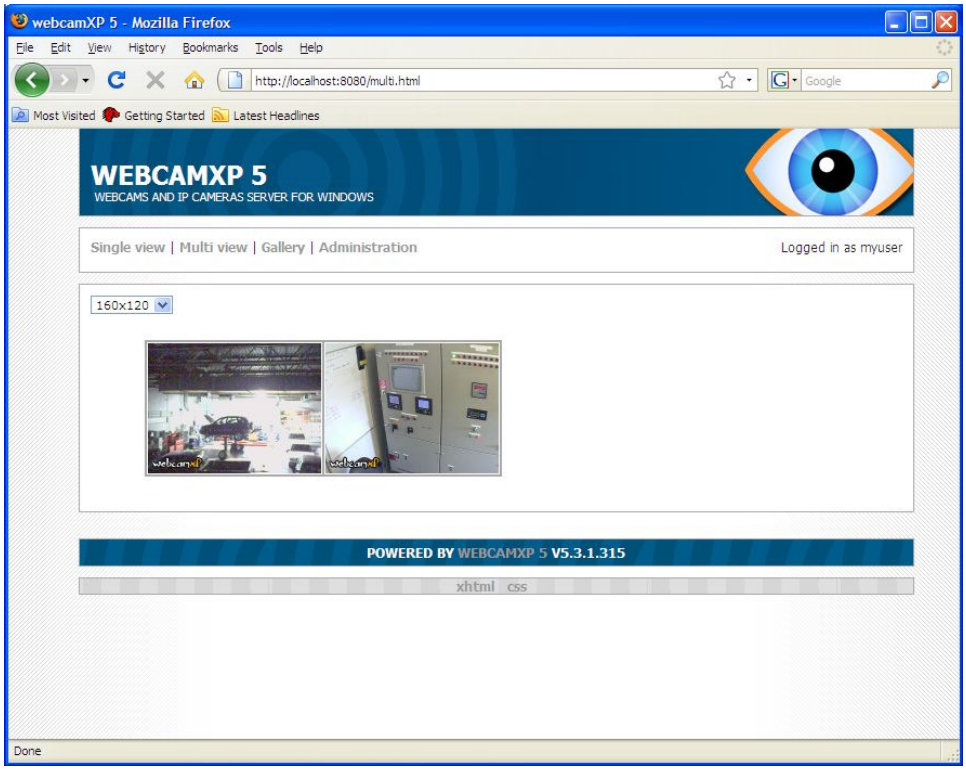
The second option, **M-Jpeg**, uses a media JPEG file format to display the output of the connected camera. This format is somewhat more intensive than Javascript, but does provide a smoother movement. Mozilla Firefox is able to render **M-Jpeg** file formats without add-ons. Internet Explorer, however, requires the installation of a plug-in in order to successfully display **M-Jpegs**.

5.1.4 Microsoft Media Player Display

The final option, **Microsoft Media Player**, uses a plug-in from the Windows Media Player application to display camera movement. **Microsoft Media Player** is the smoothest and most attractive of the display techniques, but is also the most intensive. Also, plug-ins are required for non-Microsoft browsers (e.g. Mozilla). Plug-ins may not be available for browsers running on Linux or Unix systems. Macintosh users are required to download Microsoft add-ons in order to display **Microsoft Media Player** camera representations.

5.1.4.1 Multiview

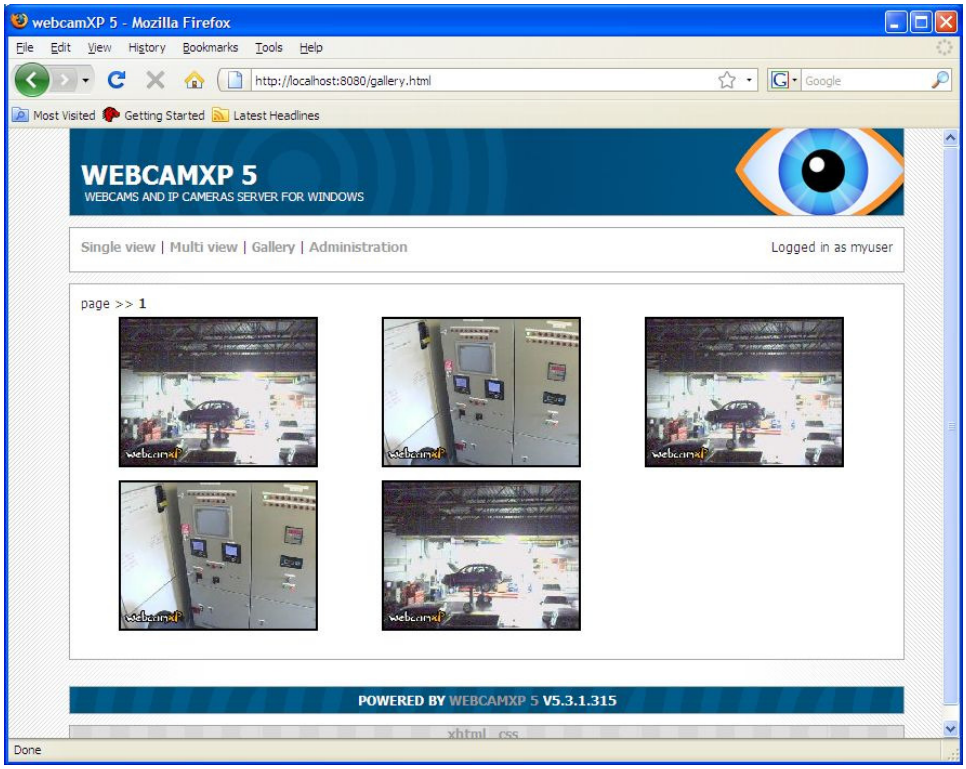
Multiview displays images from all connected cameras side-by-side. To view the **Multiview** page, click on the **Multiview** link, located on the topbar of the page. The **Multiview** page is shown below:


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/multi.html
Most Visited Getting Started Latest Headlines
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Logged in as myuser
160x120
POWERED BY WEBCAMXP 5 V5.3.1.315
xhtml css
Done

To change the size of the individual images, select a pixel width and pixel height from the drop-down box located in the upper left-hand corner of the window.

5.1.4.2 Gallery

The **Gallery** view (shown below), displays a set of still images captured from various connected cameras. The images are captured based on the settings specified in the **Online Gallery** tab of the **Monitor** section.


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/gallery.html
Most Visited Getting Started Latest Headlines
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Logged in as myuser
page >> 1
POWERED BY WEBCAMXP 5 V5.3.1.315
Done

To view the gallery view, click on the **Gallery** link, located at the top bar of the page.

5.1.5 Disabling HTTP Broadcasting

To disable HTTP broadcasting, simply navigate to the **Broadcasting (HTTP)** tab of the **Web / Broadcast** section. Click the **Disable** button, located at the top of the tab.

5.1.6 Viewing Connected Users

As users navigate to your computer and view your camera's displays, entries are listed in the **Connected users** list of the **Broadcast (HTTP)** tab. This list provides a set of specific information about connected users:

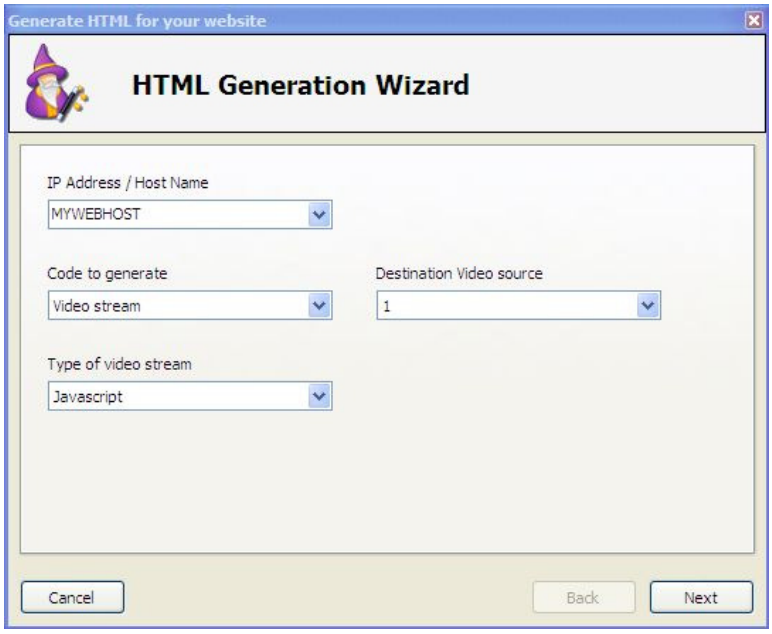
- ID (the number of the user, assigned in order of connection)
- IP Address: The user's IP address, identifying his or her computer.
- Username: The user's username, if you have password protection / accounts enabled on your webcamXP installation.
- Country: The user's country of origin.
- File: The current file the user is streaming from your cameras.
- Frames Per Second (FPS): The number of frames per second (e.g. the speed of framing) the user is experiencing as he or she watches your cameras.
- Files: The number of files the user has successfully streamed to his or her machine from your camera displays.
- Frames: The number of frames of your camera's streaming video the user has viewed since he or she connected.
- Kbytes: The number of kilobytes streamed to the connected user's machine since he or she connected.
- Duration: The amount of time the user has spent watching your cameras since he or she connected.

5.2 Creating HTML and Integrating With Your Own Site

Note: Before running this wizard, be sure to specify your system's IP Address, Hostname, or Domain name in the **IP Address / Host Name** field of the **HTTP Broadcasting Tab** (in the **Web / Broadcast** section). The HTML code generated by webcamXP contains dynamic links that must reference the correct address or host location.

One final way webcamXP allows you to share camera images is to integrate with your pre-existing or customly-coded website.

To integrate to your website, begin by having webcamXP generate the necessary HTML source code. Select **Tools > Generate HTML**. The following window will appear:



In the **HTML Generation Wizard** window, select customized options to fit your website needs. First, enter the IP Address or Host Name of the computer running webcamXP into the **IP Address / Host Name** drop-down box. If you have already configured broadcasting options, webcamXP may already know your IP Address or Host Name; if this is the case, you can simply select it from the **IP Address / Host Name** drop-down box.

Select the type of code you wish to generate by selecting an option in the **Code to generate** drop-down box. You have the following two options:

- **Video Stream:** select this option if you would like the generated HTML code to display data directly from the camera or cameras connected to computer you specified in the **IP Address / Host Name** drop-down box.
- **Chat:** select this option if you would like the generated HTML code to display the visual chat program associated with the machine you specified in the **IP Address / Host Name** drop-down box.

If you selected **Video Stream** from the **HTML code to generate** drop-down box, you must specify a type of video stream by selecting an option from the **Type of Video Stream** drop-down box. The available options are:

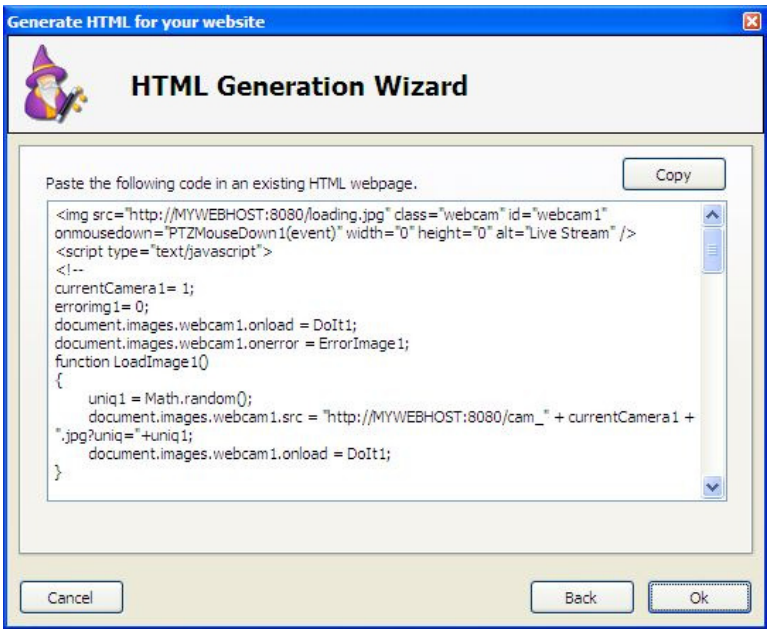
- **JavaScript:** JavaScript refreshes the page at regular intervals, thus updating the data coming from the specified connected cameras. JavaScript is a low-intensity technology that does not require the user to have third-party plug-ins (e.g. Adobe Flash Player). JavaScript is supported by default by most modern browsers.
- **M-Jpeg:** M-Jpeg is a motion JPEG image file format that displays a motion representation of a camera's output in a visitor's browser. Users of Mozilla and Mozilla Firefox browsers can view M-Jpeg

formats without additional plug-ins. Users of Microsoft Internet Explorer will be prompted to download plug-ins in order to view M-Jpeg images properly.

- **Flash:** Adobe Flash is a compiled technology that allows smooth graphical representation in browsers. Unfortunately, Flash is rather processor and memory-intensive. Flash also requires the installation of a third-party plug-in (the Adobe Flash Player). Flash is suggested for users who have modern browsers and relatively modern computing equipment.

Finally, specify the camera you wish your HTML code to represent. Make you selection from the **Destination Video Source** drop-down box.

Click the **Next** button to continue to the next step.



Click on the **Copy** button to copy the entire HTML code to your computer's clipboard. Click the **Ok** button to close the **HTML Generation Wizard** window. If you wish to make changes to your previous settings, click the **Back** button to return to the previous step in the **HTML Generation Wizard**.

Open your website's HTML editor (e.g. Macromedia Dreamweaver, Adobe GoLive!, Notepad, etc.) and copy the HTML code into your website source code. The HTML represents an encapsulated object. Therefore, place the webcamXP-generated HTML into your website in the **exact** location you wish your camera image to appear.

5.3 Uploading via FTP

If you wish to host pictures from your various connected cameras to an Internet repository for downloading, you may wish to consider using FTP. FTP allows you to upload files for download hosting, and does not create a website for user interaction. Users who wish to download captured images from your camera simply need to navigate to your FTP website. When your page loads, the user will be presented with an online representation of the FTP site's directory structure, allowing him or her to navigate to and download your camera images.

webcamXP contains the full functionality of automatic FTP uploads. You can specify webcamXP to autonomously take images from your various cameras and upload them to your specified FTP upload at a specific time interval.

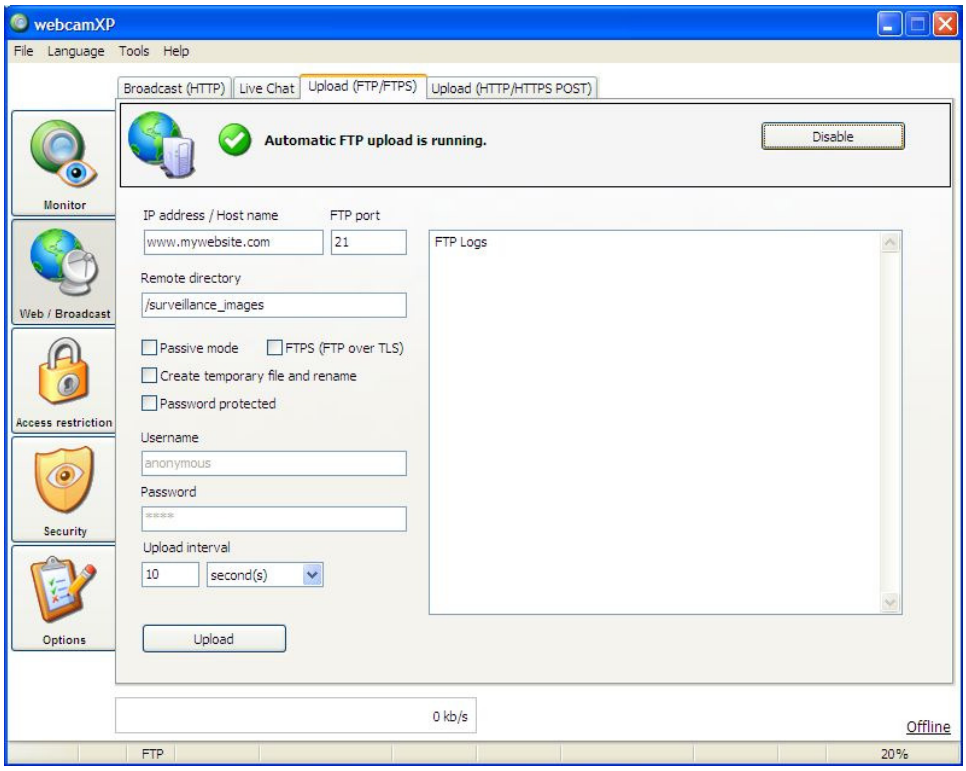
The following sections describe how to enable and set up automatic FTP uploads.

5.3.1 Enabling FTP Upload

To enable FTP upload, simply open the **Upload (FTP/FTPS)** tab from the **Web / Broadcast** section.

Click on the **Activate** button, located at the top right-hand corner of the screen.

When FTP uploads are successfully enabled, you will be presented with a green check mark, shown below:



5.3.2 Specifying FTP URL, Port, Username, and Password

In order for your FTP uploads to successfully complete automatically, you must specify information regarding your FTP website and account.

Begin by entering the URL of your FTP server in the **IP Address/ Host Name** textbox. The ftp:// prefix is assumed and does not need to be entered.

Also, specify the FTP port of your FTP server. If you are unsure about what port to use, contact your FTP system administrator. The default FTP port is 21. Enter your port in the **FTP Port** textbox.

If you want your images to automatically upload to a specific directory on your FTP server, enter the **relative path** (based on the FTP root directory) in the **Remote directory** textbox. In the above example, images will be uploaded to ftp://www.mywebsite.com/surveillance_images.

If you have a firewall set up on your local network (the network connected to the computer running webcamXP), you may wish to enable FTP passive mode. With passive mode, your computer (the client) initiates all connections. If passive mode is not used and a firewall is in place, the firewall may block connections made by the FTP server (required to begin FTP transfers). To enable passive mode, check the **Passive Mode** checkbox. If you are unsure whether passive mode is required, contact your system administrator.

If your FTP server is an FTPS server (Secure FTP), enable FTPS transfers by checking the **FTPS (FTP over TLS)** checkbox.

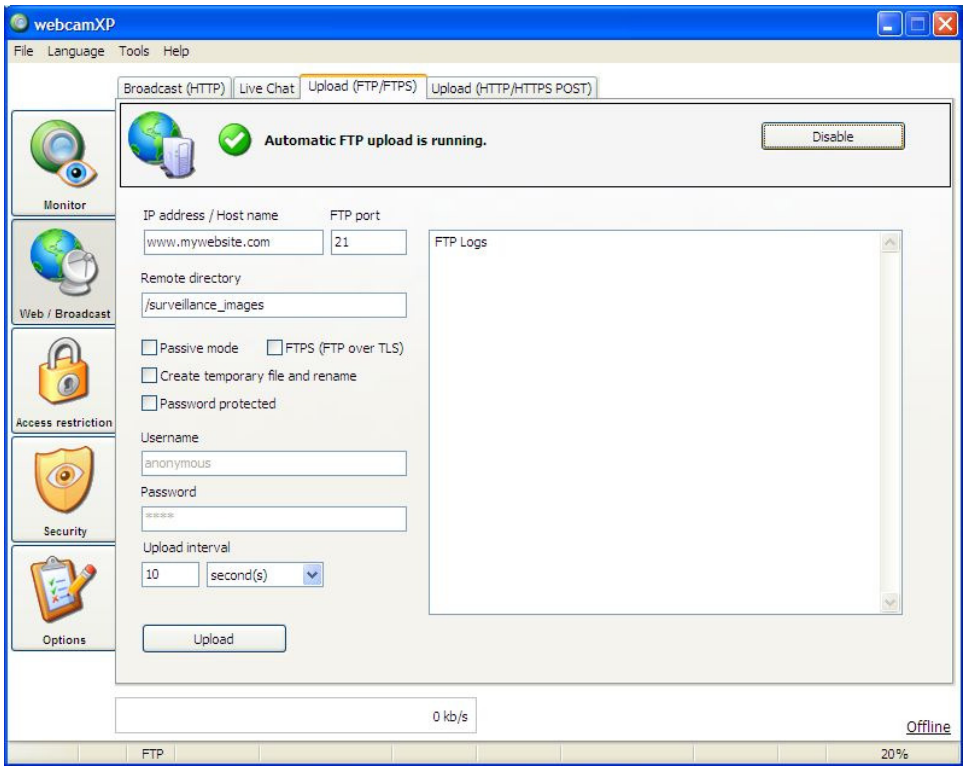
Check the **Create temporary file and rename** option if you wish to have the FTP server transfer all of your files to the FTP server and then en-mass rename them to the correct naming convention. This can increase transfer reliability. Without this option checked, the system will transfer each file and rename it on the server individually (potentially causing connection problems or timeout issues if the FTP server is busy or lagging).

If your FTP server requires a password, check the **Password Protected** checkbox. Checking this option will enable the **Username** and **Password** textboxes. Enter your FTP username in the **Username** textbox and enter your FTP password in the **Password** checkbox.

Once all the above options are set, webcamXP will be set to automatically upload images. Please see the next section, **Scheduling Regular FTP Uploads** to customize your FTP upload time interval.

5.3.3 Scheduling Regular FTP Uploads

In order to schedule regular FTP uploads, you must specify a regular time interval. Enter a numerical value in the **Upload interval** textbox, and select a time unit from the **Upload interval** drop-down box:



In the above example, camera images will be automatically uploaded to ftp://www.mywebsite.com:21/surveillance_images every 10 seconds.

If you wish to force an upload (immediately take images from your cameras and upload them to FTP), click the **Upload** button (directly below the **Upload interval** inputs).

5.4 Uploading via HTTP

webcamXP provides HTTP users similar functionality to FTP users. If you wish to host your camera images on a standard web server (HTTP), you may use webcamXP's automatic HTTP upload functionality.

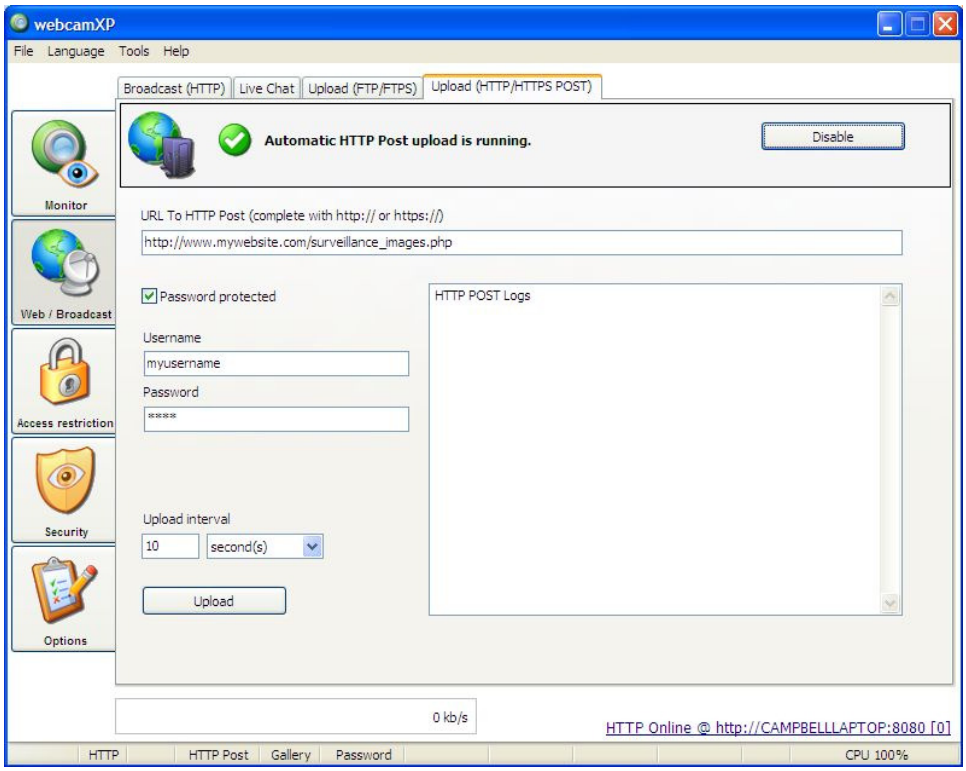
webcamXP HTTP Uploads work using an HTTP POST. HTTP POST is the action performed when you click on the **Submit** button on a standard website form. You can therefore program your HTTP website (in Perl, PHP, Ruby, etc.) to handle the POST action and perform any customized action on your camera images. This functionality allows greater flexibility in handling camera images (FTP uploads merely copy your camera images to a server for storage).

The following sections describe enabling and setting up HTTP automatic uploads.

5.4.1 Enabling HTTP Uploads

To enable automatic HTTP uploads, navigate to the **Upload (HTTP / HTTPS POST)** tab in the **Web / Broadcast** section.

Click the **Activate** button to enable HTTP uploads. When the service has been successfully started, you will be presented with a green check mark (shown below):



5.4.2 Specifying HTTP URL, Username, and Password

In order for your camera files to be successfully posted to your HTTP website, you must specify your website's URL and login credentials.

Enter your complete website address (including the http:// or https:// prefix) in the **URL To HTTP Post** textbox. If you do not include a file name, the standard HTTP index page (index.html, index.php, etc.) will be assumed.

If you wish to handle your camera images using a specific file, you must include it in your HTTP URL (e.g. http://www.mywebsite.com/surveillance_images.php).

If your HTTP website requires a login (username / password) in order to post, check the **Password protected** checkbox. This option is required in the cases of pages being protected using .htaccess. Contact your system or website administrator if you are unsure whether a username or password is required.

Checking the **Password Protected** checkbox enables the **Username** and **Password** textboxes. Enter your login credentials in the **Username** and **Password** textboxes.

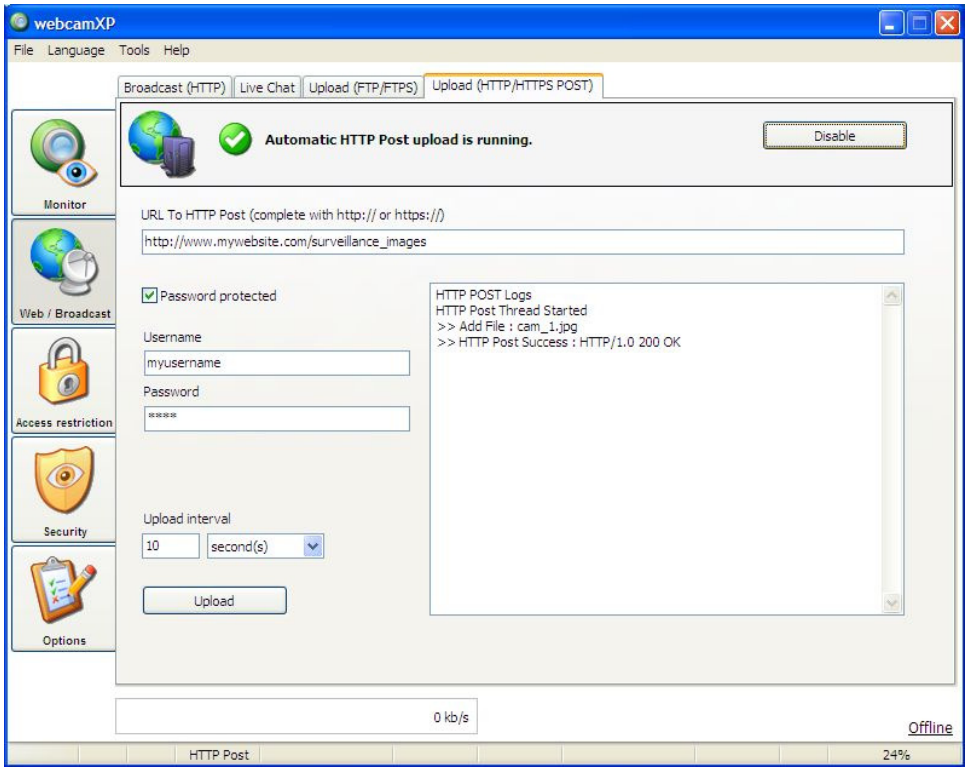
5.4.3 Scheduling Regular HTTP Uploads

In order to schedule regular HTTP upload Posts, you must customize the values in the **Upload interval** fields. Enter a numerical value in the **Upload interval** textbox and select a time unit from the **Upload interval** drop-down box.

In the example presented in the previous section, camera images will be taken and posted every 10 seconds.

If you wish to force an upload (e.g. take pictures from your cameras and post them to your website immediately), click the **Upload** button.

When uploads are performed, they will be listed in the **HTTP POST Logs** textbox (as shown below):



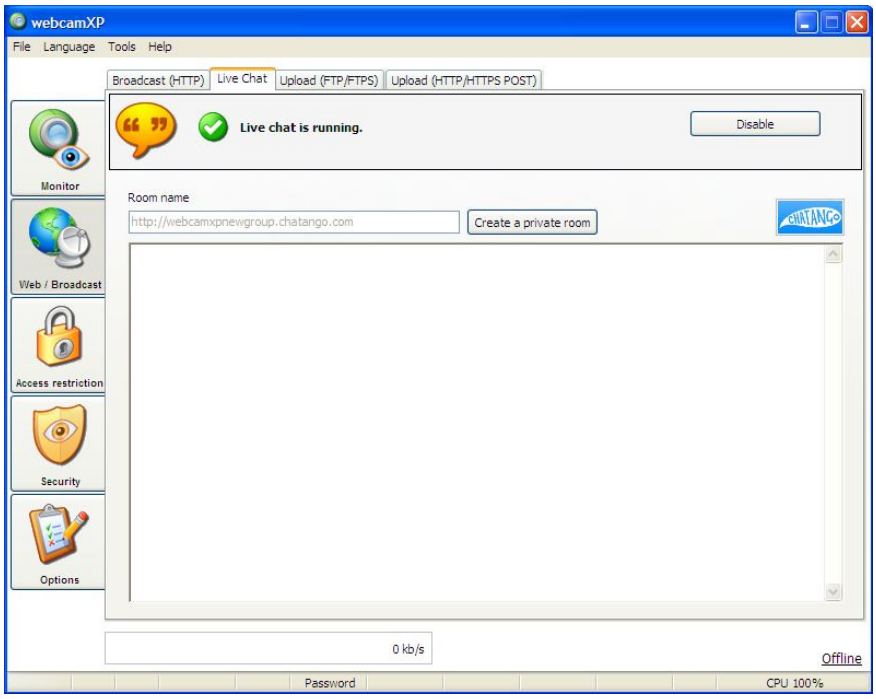
5.5 Live Chat

Live Chat gives you the flexibility to set up an online talking space for visitors to your shared camera website. The service is run by Chatango and requires you to register a user name in order to implement Live Chat in your custom website.

5.5.1 Enabling Live Chat

In order to enable Live Chat functionality, you must begin the service. Navigate to the **Live Chat** tab of the **Web / Broadcast** section.

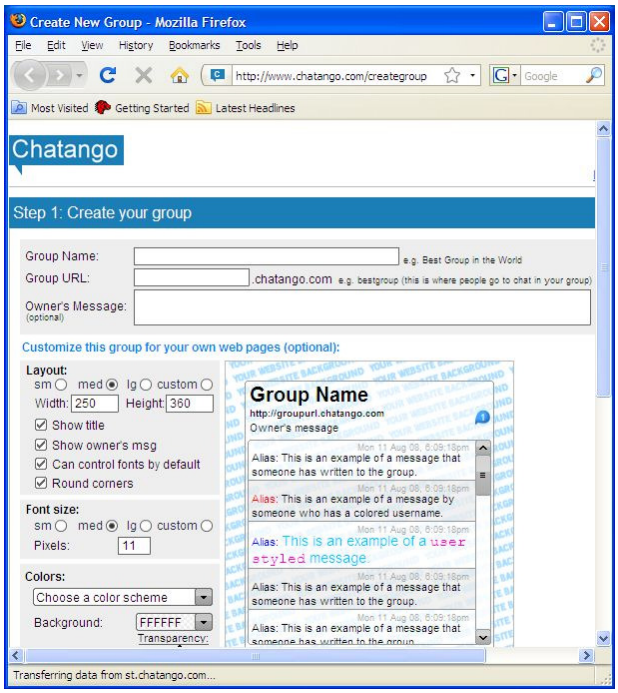
Enter the URL of a Chatango chat room in the **Room Name** textbox. Click the **Activate** button to begin the service. A new window will appear in the **Live Chat** box:



5.5.2 Create a room

In order to create a new chat room, navigate to the **Live Chat** tab of the **Web / Broadcast** section. Click the **Create a Private Room** button.

The following website will appear:

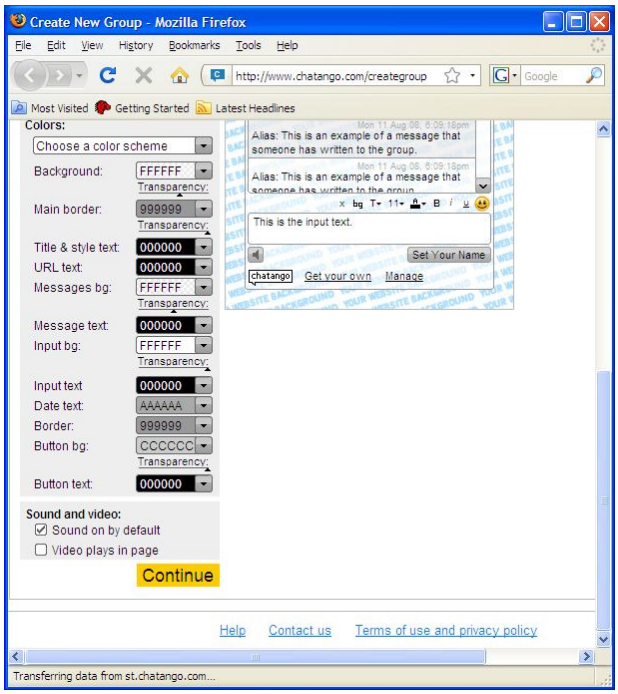

Create New Group - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://www.chatango.com/creategroup
Most Visited Getting Started Latest Headlines
Chatango
Step 1: Create your group
Group Name:
e.g. Best Group in the World
Group URL:
.chatango.com e.g. bestgroup (this is where people go to chat in your group)
Owner's Message:
(optional)
Customize this group for your own web pages (optional):
Layout:
sm med lg custom
Width: 250 Height: 360
Show title
Show owner's msg
Can control fonts by default
Round corners
Font size:
sm med lg custom
Pixels: 11
Colors:
Choose a color scheme
Background: FFFFFF
Transparency:
Group Name
http://groupurl.chatango.com
Owner's message
Alias: This is an example of a message that someone has written to the group.
Alias: This is an example of a message by someone who has a colored username.
Alias: This is an example of a user styled message.
Transferring data from st.chatango.com...

You must register your group's name by entering it into the **Group Name** textbox. Each Chatango group is given a URL which can be directly referenced by members who wish to communicate. Enter a name for your group's URL into the **Group URL** textbox. Please note that all Chatango URLs end in ".chatango.com."

If you wish to enter a message to users who join your group, enter your message in the **Owner's Message** textbox.

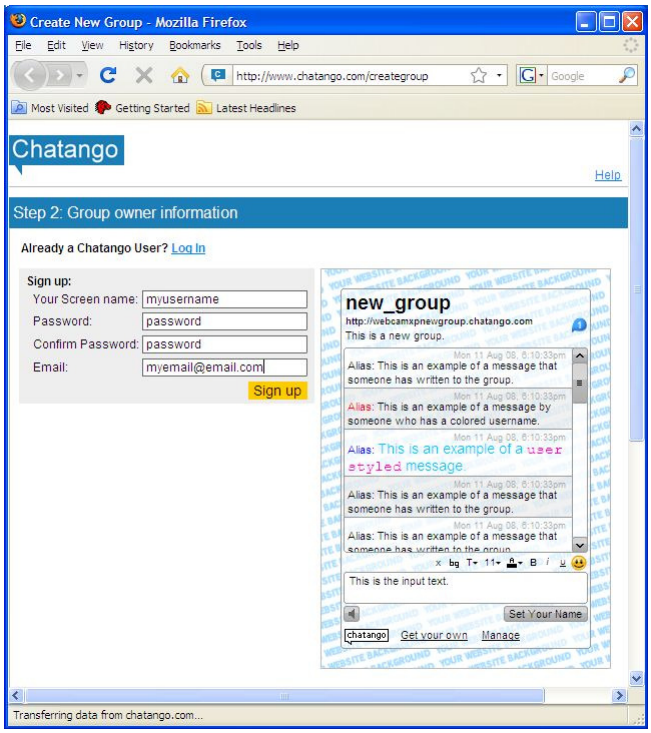
You may also want to specify custom styles for your new group. Select layout particulars by specifying options in the **Layout** box. The layout options available include color schemes, custom background and specific colors (entered in hexadecimal format), and various Boolean options that control whether or not to display the title, whether or not to display the owner's message, etc.

Click the **Continue** button (as shown below) when all information is properly entered:

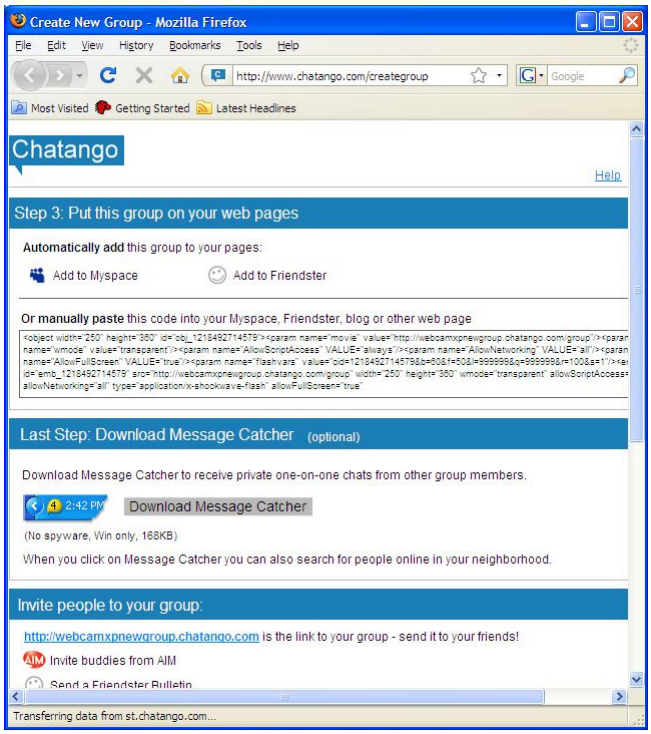


In the next page that appears, create yourself a username and password. Enter your username in the **Username** textbox and enter your password in both the **Password** textbox and the **Confirm Password** textboxes. Enter a valid email address in the **Email** textbox.

Click the **Sign Up** button to create your account.


Create New Group - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://www.chatango.com/creategroup
Most Visited Getting Started Latest Headlines
Chatango
Help
Step 2: Group owner information
Already a Chatango User? Log In
Sign up:
Your Screen name: myusername
Password: password
Confirm Password: password
Email: myemail@email.com
Sign up
new_group
http://webcamxpnewgroup.chatango.com
This is a new group.
Alias: This is an example of a message that someone has written to the group.
Alias: This is an example of a message by someone who has a colored username.
Alias: This is an example of a user styled message.
This is the input text.
Set Your Name
Chatango Get your own Manage
Transferring data from chatango.com...

From the page that is displayed, you can copy the manual HTML code and paste it into a custom-designed website, or you can automatically post the creation of your new Chatango group in MySpace.


Create New Group - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://www.chatango.com/creategroup
Most Visited Getting Started Latest Headlines
Chatango
Help
Step 3: Put this group on your web pages
Automatically add this group to your pages:
Add to Myspace
Add to Friendster
Or manually paste this code into your Myspace, Friendster, blog or other web page
Last Step: Download Message Catcher (optional)
Download Message Catcher to receive private one-on-one chats from other group members.
Download Message Catcher
(No spyware, Win only, 168KB)
When you click on Message Catcher you can also search for people online in your neighborhood.
Invite people to your group:
http://webcamxpnewgroup.chatango.com is the link to your group - send it to your friends!
Invite buddies from AIM
Transferring data from st.chatango.com...

6 Access Restriction and Password Protection

PRIVATE/PRO VERSION

It may become necessary to restrict camera access to a select few users, or to block certain computers from accessing your camera's data. webcamXP comes with an extensive set of security functionality, allowing you to easily restrict access to your data.

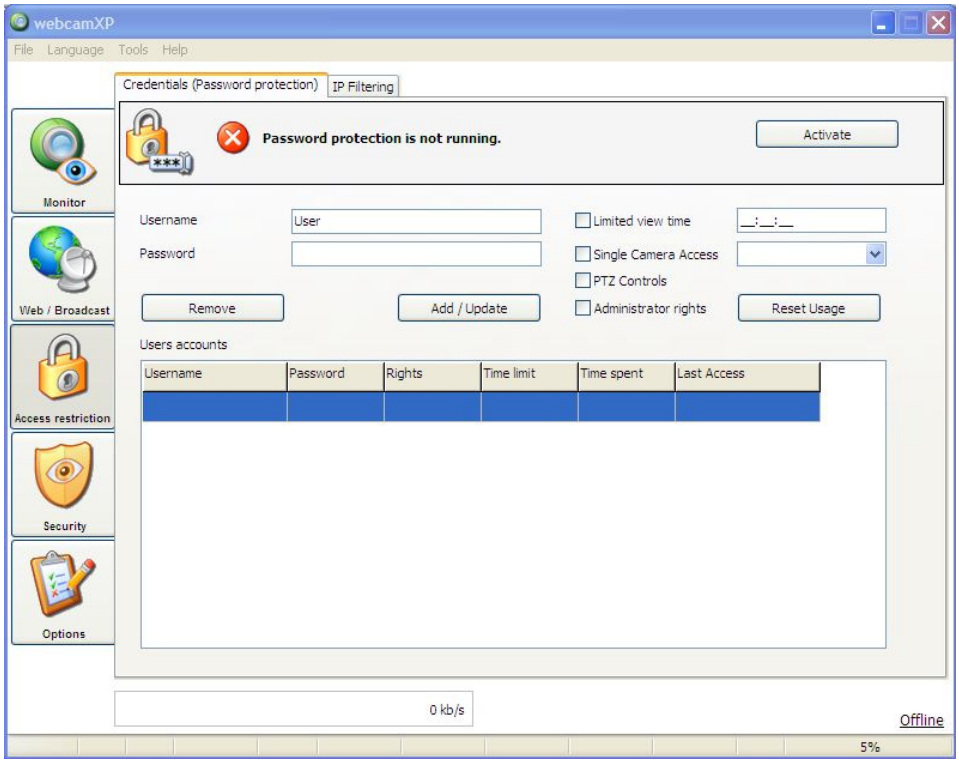
The following sections describe the process of restricting access to your data.

6.1 Restricting Access to Specific Users

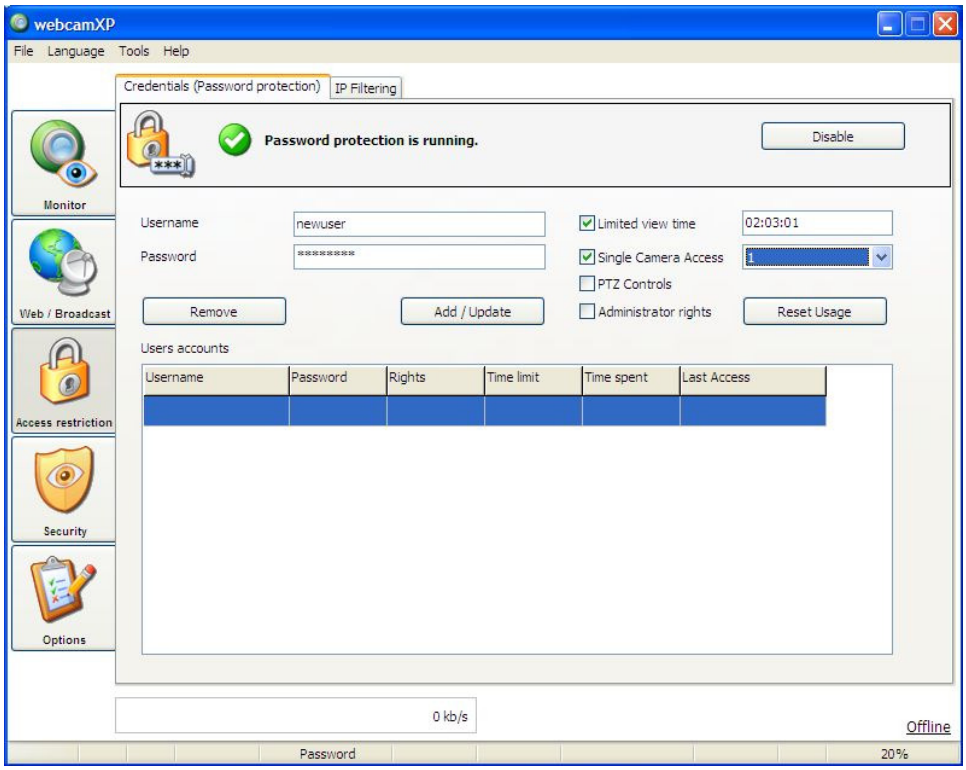
The most common type of restriction is user restriction. webcamXP allows you to create a set of user accounts for your cameras. When user accounts are created, webcamXP is blocked to all users who do not have a valid set of login credentials.

To gain access to the user account settings, navigate to the **Credentials (Password Protection)** tab of the **Access Restriction** section.

The following window will appear:



Enable password protection by clicking on the **Enable** button. When password protection is successfully enabled, you will be presented with a green check mark (shown below):



6.1.1 Creating a New User

To create a new user, enter a username in the **Username** textbox. Enter a password for the new user into the **Password** textbox.

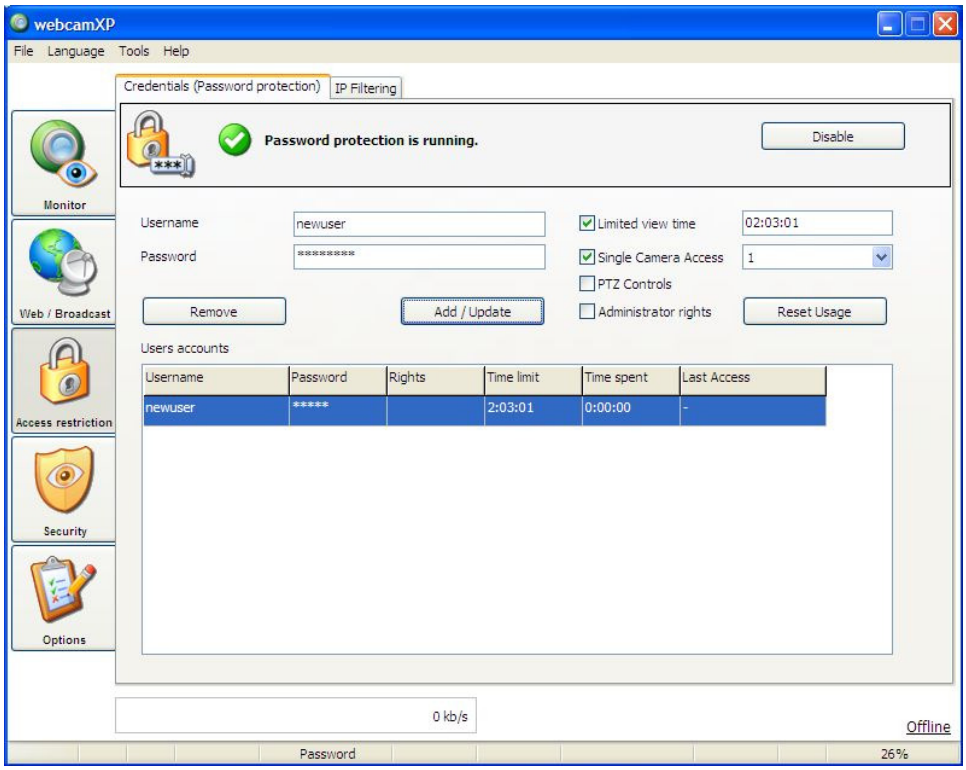
There are a set of options you can specify for your new user. If you want your user to be limited to a specific amount of time, check the **Limited view time** checkbox. Enter a time string into the **Limited view time** textbox. A time string must be in the format HH:MM:SS (two digit hour, colon, two digit minutes, colon, two digit seconds). In the above example, user "newuser" is limited to 2 hours, 3 minutes, and 1 second of view time. After this amount of time has elapsed, newuser will be logged out and temporarily blocked from gaining access to your cameras.

If you wish the user to only have rights to view one specific camera, check the **Single Camera Access** checkbox and select the camera identification number from the **Single Camera Access** drop-down box.

If you wish the user to have administrative rights (e.g. the ability to add/remove cameras, add/remove users, set restriction rights, and edit upload and broadcast information), check the **Administrator Rights** checkbox.

If you wish to start any of your options selections again or wipe out any option selection changes, check the **Reset Usage** button.

To add your newly-created user, click the **Add / Update** button. The user will appear in the **User accounts**:



6.1.2 Editing an Existing User

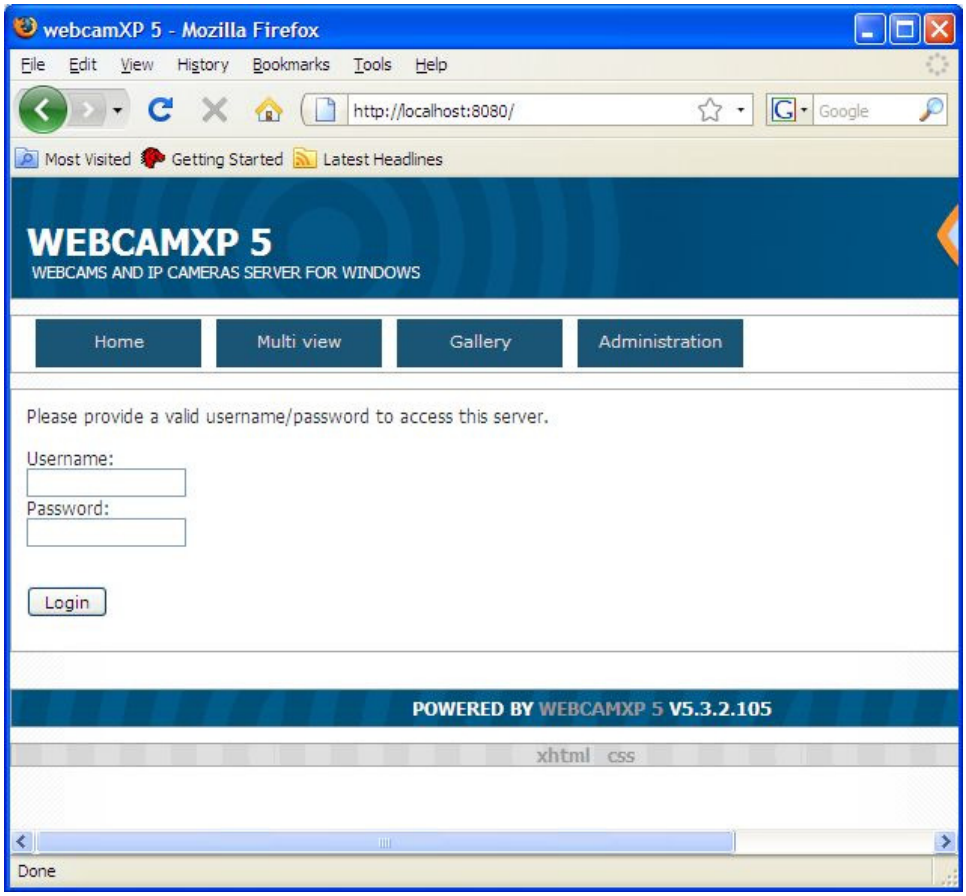
To edit an existing user, select the user's account entry from the **User accounts** list. The textboxes at the top of the **Credentials (Password Protection)** tab will update with all of the user's currently-set option values.

Edit the option values as you see fit. Once your changes are complete, click the **Add / Update** button to make the changes final.

If you wish to remove a user and delete his or her account, simply select the user's account from the **User Accounts** list and click the **Remove** button.

6.2 Users and HTTP Broadcasting

If you enable password protection and add users, your HTTP Broadcasting page will automatically be password protected. Users who visit your website will be presented with the following login page:



The user will be required to enter his or her password in the **Username** and **Password** textboxes before being taken to view the output of connected cameras.

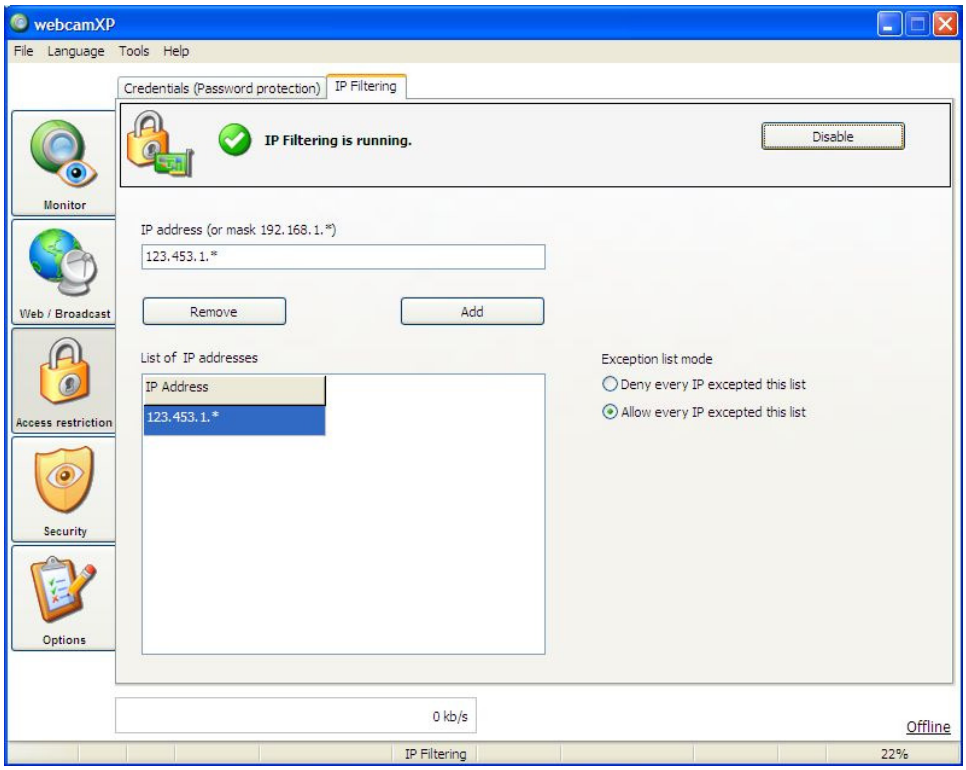
6.3 Restricting Access to Specific IP Addresses

If you know the IP address or set of IP addresses belonging to malicious users and wish to prevent them from gaining access to your camera and camera settings, you may wish to take advantage of webcamXP's IP blocking functionality.

To enable this functionality, navigate to the **IP Filtering** tab of the **Access Restriction** section.

Click the **Activate** button to begin IP Filtering.

When IP Filtering is successfully enabled, you will be presented with a green check mark (shown below):



6.3.1 Blocking New IP Addresses

To block a new IP address or set of IP addresses, enter the IP address in the **IP address** textbox. You may use the wildcard character asterisk (*) to create a mask (thus allowing you to block multiple IP addresses with one entry).

In the example in the previous section, all IP addresses beginning with 123.453.1 are blocked using the mask 123.453.1.*.

Click the **Add** button to add the new IP address or mask.

In order to block the IP addresses on the list, select the **Allow every IP excepted this list** option box.

If you wish to allow only a select few IP addresses and block all others, enter the **allowed** IP addresses into the **List of IP Addresses** list and select the **Deny every IP excepted this list** option box.

6.3.2 Editing Previous Block Settings

You cannot edit the IP address within the list. In order to change an IP address, you must remove it from the list and replace it with a new entry. Select the IP address or mask you wish to change from the **List of IP Addresses** list. Click the **Remove** button to delete it from the list.

Enter your new IP address or mask in the **IP address** textbox and click the **Add** button.

7 Security

The **Security** section provides a list of tools allowing you to use webcamXP for camera-based security purposes. With the **Security** section, you can use your cameras for motion detection, audio detection, and reconnaissance.

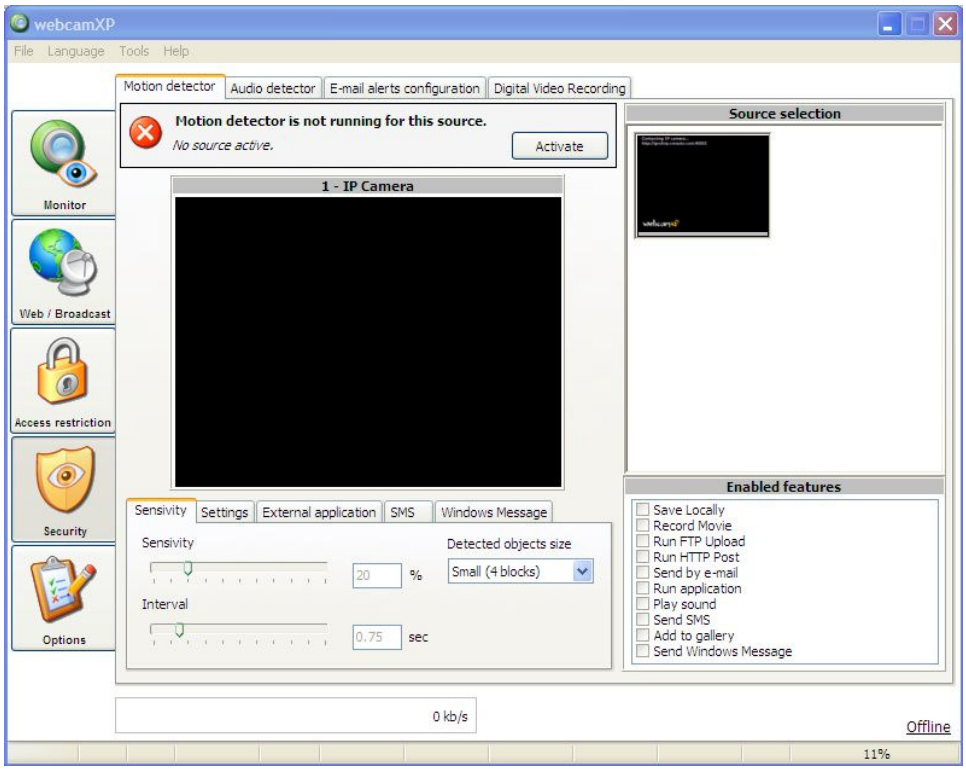
The following sections describe the **Security** section and provide instructions on configuring and enabling webcamXP's security functionality:

7.1 Motion Detector

PRO VERSION

One of the most flexible functions webcamXP can provide is motion detection. Cameras can be set up to provide users with email alerts, text message alerts, or on-desktop Windows alerts when motion is detected.

To configure motion detection, select the **Motion Detector** tab in the **Security** section of webcamXP. The following window will appear:



Before you activation motion detection, you have the option to specify a series of configuration options. The configuration options may or may not be dependent upon enabling specific features. For more information on enabling features, please see the section titled **Enabling Features**.

The following subsections describe the process of specifying motion detector options and enabling motion detection:

7.1.1 Sensitivity

If sensitivity of your cameras is set improperly, the camera will react incorrectly to stimuli. If sensitivity is too high, cameras connected to webcamXP will watch for motion too minutely and webcamXP will send alerts at insignificant occurrences within the camera views.

Sensitivity is specified by specifying values for the fields in the **Sensitivity** tab, located at the bottom of the **Motion detector** window.

To specify sensitivities, first select a camera (or cameras) from the **Source Selection** box.

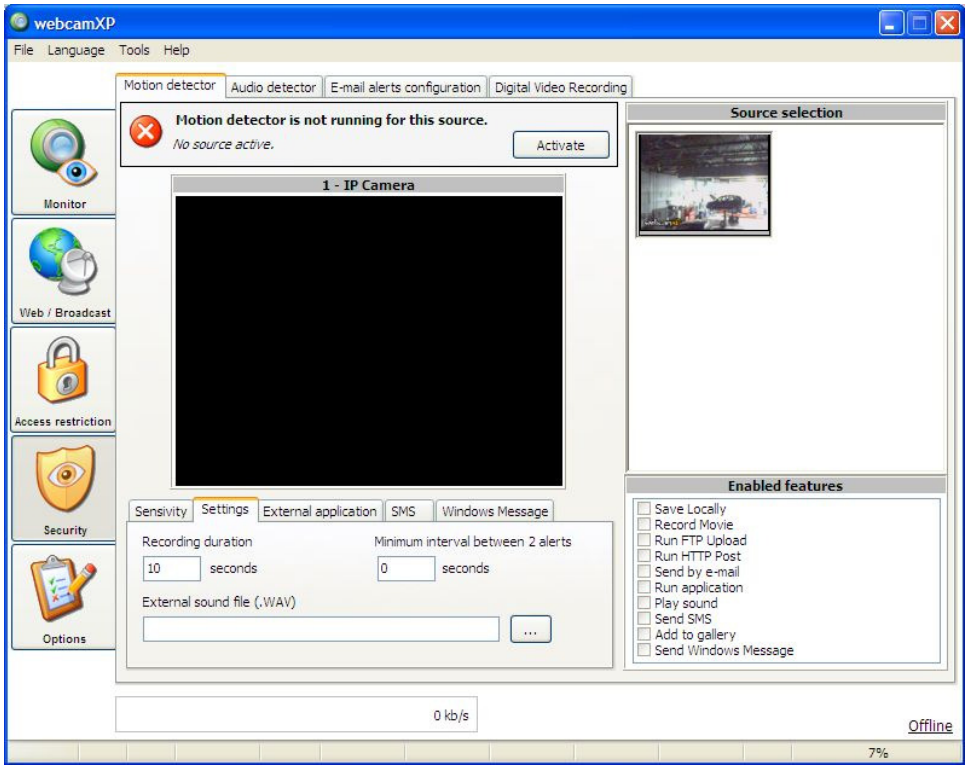
Slide the **Sensitivity** indicator bar to adjust basic sensitivity. A corresponding percentage value will be placed in the textbox to the right of the **Sensitivity** indicator bar. The higher the percentage, the more sensitive the selected camera(s) will be, and the less violent a movement will be required to initiate an alert.

Select an interval time to specify how long the camera is able to collate bouts of movement using the **Interval** indicator bar. The higher the interval, the longer two bouts of motion can be from each other and still be considered one movement. An example of an interval setting would be a person walking within view of the camera. The person walks in view of the camera, pauses for a specific interval of time, and then moves again. If the **Interval** indicator bar were set at 0.75 seconds, the person could pause for under 0.75 seconds and have his initial movement into camera view and his final movement recorded by the camera as one piece of movement.

Sensitivity can also be increased by adjusting the **Detected Objects Size** drop-down box. Objects detected by cameras are divided into meshed square blocks. This meshing allows webcamXP to determine an object's size. If the **Detected Objects Size** drop-down box is set too high, only movement from large objects (or objects close to the camera) will trip an event. If the **Detected Objects Size** drop-down box is set too low, the motion detector will indicate events for movement form inconsequential objects.

7.1.2 General Settings

To edit general settings for the motion detector, select the **Settings** tab. The full **Settings** tab is shown below:

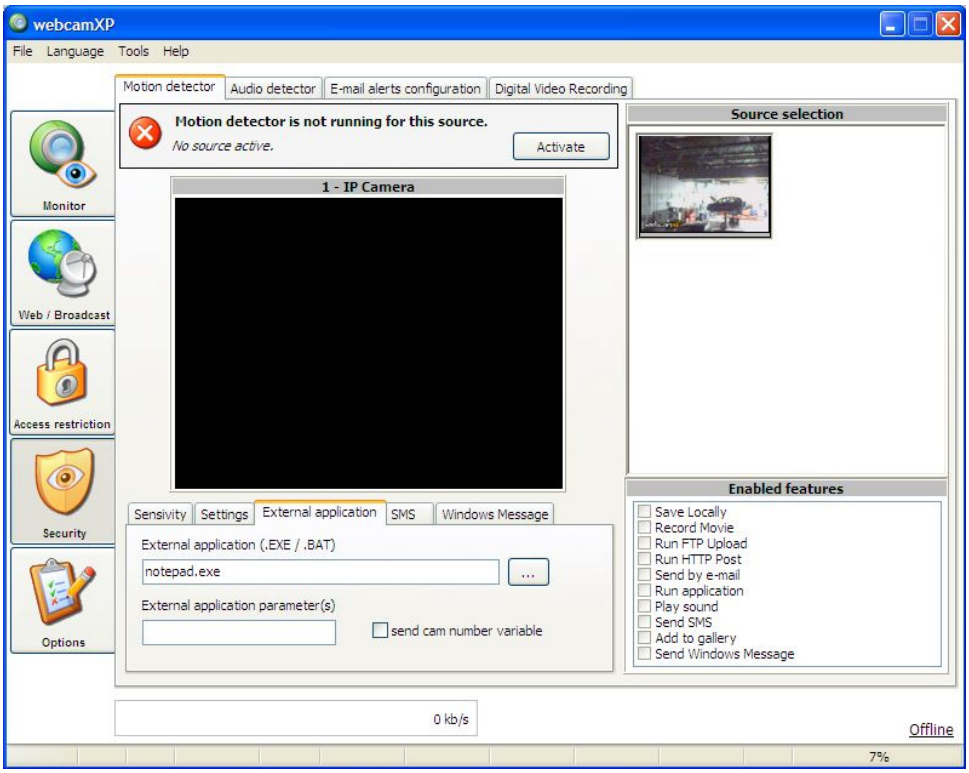


The following options are available in the **Settings** tab:

- **Recording Duration:** Enter into this text box the number of seconds you wish the motion detector to record video once an event is tripped (e.g. a motion is detected). This option is only applicable if you enable **Record Movie**, in the **Enabled features** box (see the section titled **Enabling Features**).
- **Minimum interval between 2 alerts:** Enter into this text box the minimum number of seconds you wish webcamXP to wait after one event before listening for the next one. Therefore, if movement is constant, events will trip in even intervals based on the value you enter into the **Minimum interval between 2 alerts** textbox.
- **External sound file (.WAV):** Select in this file a WAV audio file you would like webcamXP to play when an event is tripped. Click the **...** button to the right of the textbox. A standard Windows **Open** dialog will appear. Navigate to and select a WAV file to play. Click the **Open** file.

7.1.3 External Application Settings

To set **External Application Settings**, click on the **External Application Settings** tab. The complete **External Application Settings** tab is shown below. The settings in this tab are only applicable if the **Run application** feature is enabled in the **Enabled features** box.



The following options are available for specification:

- **External Application (.EXE / .BAT):** Select in this form the executable or batch file you wish to run when an alert is tripped by the motion detector. Click the **...** button to the right of the **External Application (.EXE / .BAT)** textbox. A standard Windows **Open** dialog will appear. Navigate to and select your chosen executable or batch file. Click the **Open** button.

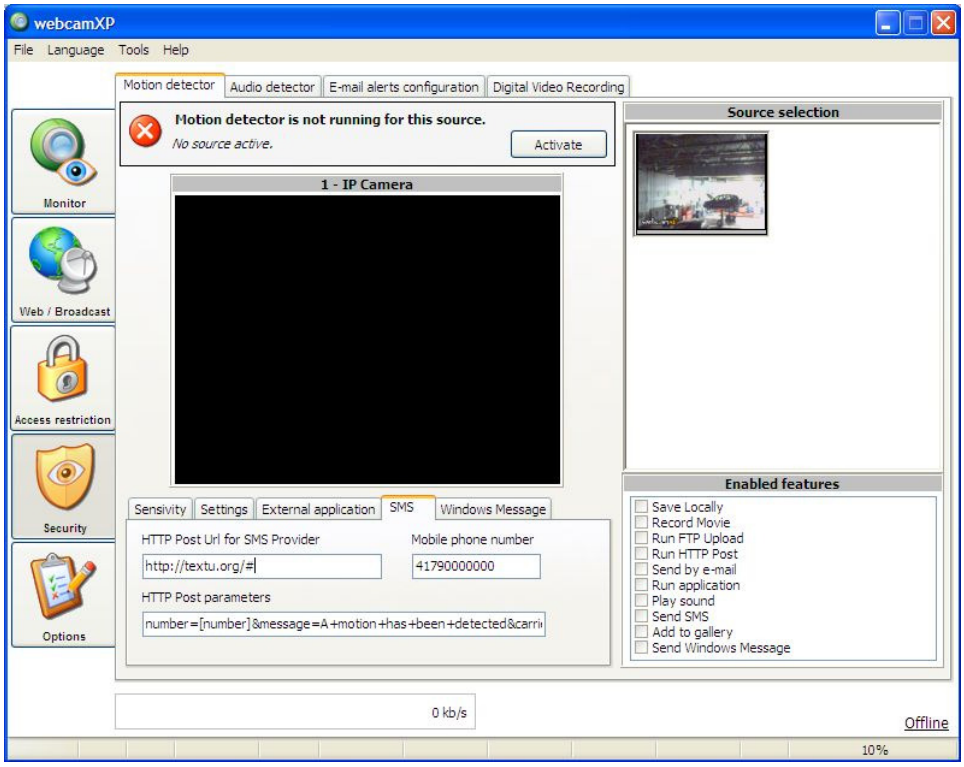
- **External Application Parameters:** Enter into this textbox the parameters you wish to send when loading your specified executable or batch file.

- **Send cam number variable:** Check this box if you wish to send your selected executable or batch file the number of the camera that tripped the event when the executable or batch file is called.

7.1.4 SMS (Text Message) Settings

The features in the **SMS** tab require that the **Send SMS** feature be enabled. For more information on enabling the **Send SMS** feature, see the section **Enabling Features**.

The **SMS** settings tab is shown below:



Enter the URL of your SMS delivery service in the **HTTP Post Url for SMS Provider** textbox. By default, the service http://www.textu.org is used.

Enter your cell phone's number (including country code) in the **Mobile phone number** textbox.

Enter any parameters you wish to pass your SMS delivery service in the **HTTP Post parameters** textbox. The default string is shown below:

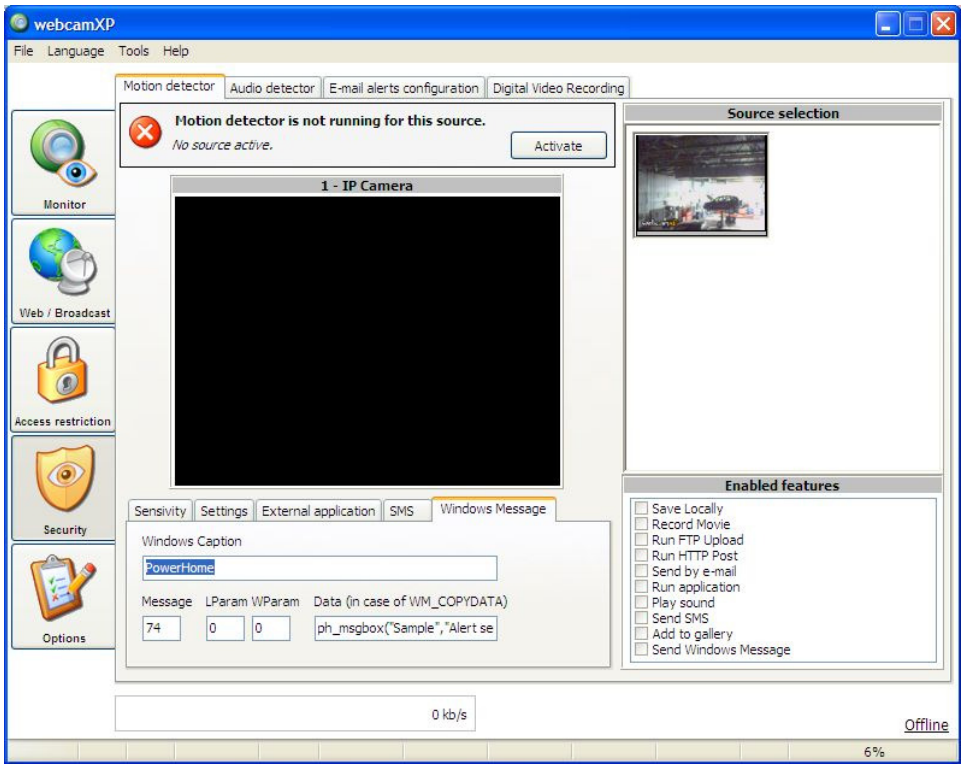
number=[number]&message=A+motion+has+been+detected&carrier=teleflip&submit=Send+it

Parameters are separated by ampersands (&). Spaces in strings (e.g. "A motion has been detected") are replaced with plus signs (+). The above example also uses the webcamXP-specific variable [number]. When the parameters are sent to your SMS provider, [number] is replaced by the number of the camera that tripped the event, prompting a text message.

7.1.5 Windows Message Settings

The settings in the **Windows Message Settings** tab require that the **Send Windows Message** feature is enabled. See the section titled **Enabling Features** for more information on enabling the **Send Windows Message** feature.

The **Windows Message Settings** tab is shown below:



You can specify the following options:

- **Windows Caption:** The text displayed on the title bar of the main windows of the target application. By default webcamXP will check to see if an application matching the **Windows Caption** text is running (e.g. it will search if "PowerHome" is running). **Note:** It is possible to invoke any application if you know the application's title bar text.

- **Message:** Enter into this text box the message number you wish displayed. There are generic message numbers (SHOW_WINDOW, etc…). A list of these generic message numbers can be found in the Microsoft Windows documentation..

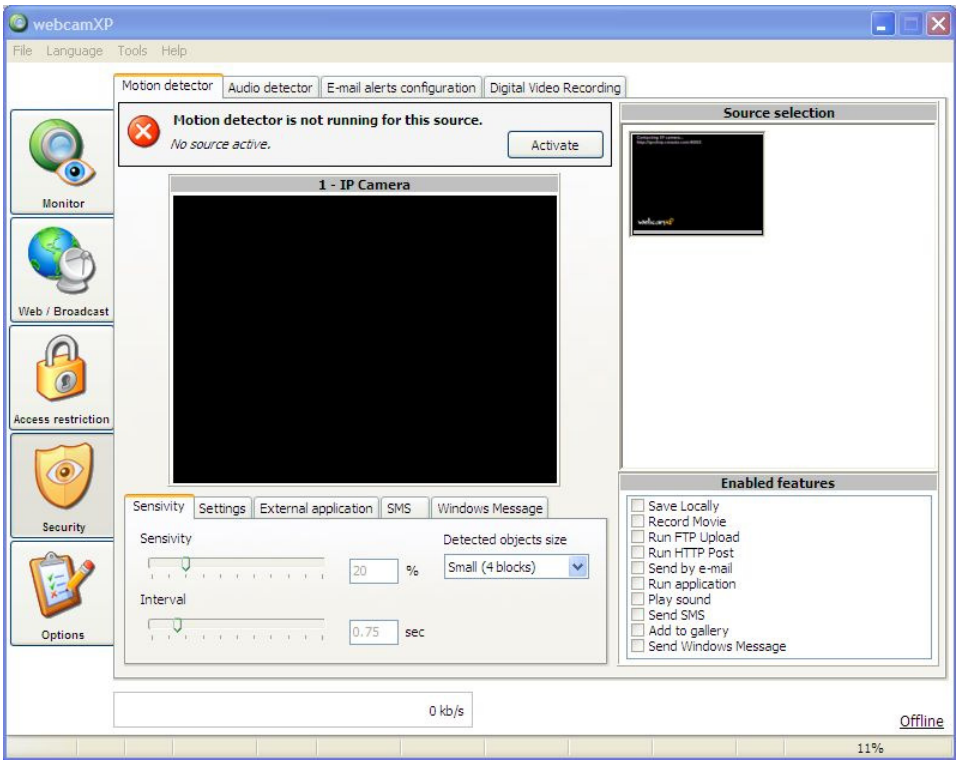
- **Lparam:** Enter into this textbox a value for the first parameter sent with the message.

- **Wparam:** Enter into this textbox a value for the second parameter sent with the message.

- **Data:** If you send the WM_COPYDATA (74) message, webcamXP will expect text parameters. Enter the textual data you wish to send the target application in the **Data** textbox. **Note:** not all target applications can accept text parameters.

7.1.6 Enabling Features

Features are listed in the **Enable Features** box on the right-hand side of the **Motion Detector** tab:



The following features are available:

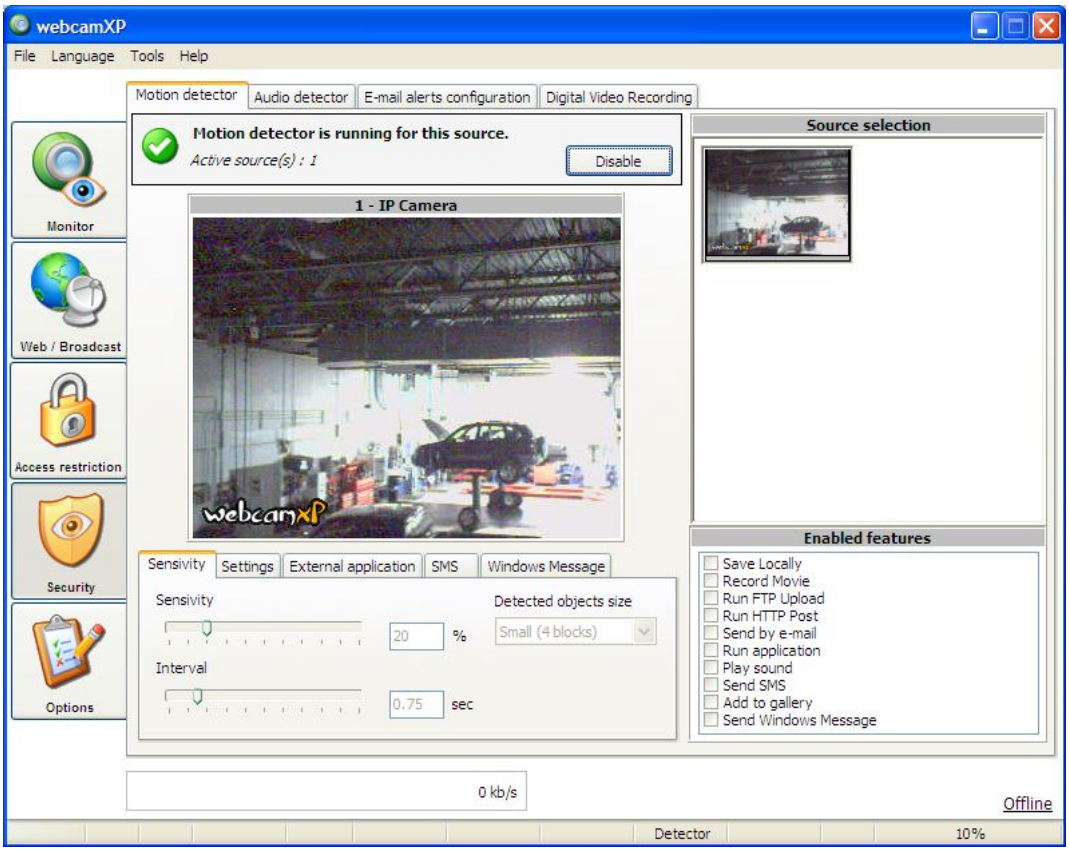
- **Save locally:** This feature saves information about the alert on the machine running webcamXP.
- **Record Movie:** This feature records the output of a camera when an alert is tripped. The output of the camera is saved as a movie file on the machine running webcamXP.
- **Run FTP Upload:** This feature uploads a snapshot of the camera's output when an event is tripped. The FTP Upload is performed based upon the settings specified in the **Upload (FTP / FTPs)** tab of the **Web / Broadcast** section.
- **Run HTTP Post:** This feature posts a snapshot of the camera's output when an event is tripped. The HTTP Post is performed based upon the settings specified in the **Upload (HTTP / HTTPS POST)** tab of the **Web / Broadcast** section.
- **Send by email:** This feature sends an email when an event is tripped. Email settings are specified in the **Email alerts configuration** tab.
- **Run Application:** This feature runs an application when an event is tripped. If you wish to customize the application webcamXP will run when an event is tripped, change the settings in the **External Application** tab.
- **Play sound:** This feature plays a WAV file whenever an event is tripped. To specify the WAV file to play, specify the options in the **Settings** tab.
- **Send SMS:** This feature sends a text message (using an SMS delivery service) when an event is tripped. Settings for the SMS feature are specified in the **SMS** tab.

- **Add to Gallery:** This feature adds a snapshot of the camera's output to the online hosted gallery whenever an event is tripped.

- **Send Windows Message:** This feature displays a Windows message when an event is tripped. Settings for the Windows Message feature are specified in the **Windows Message** tab.

7.1.7 Activating Motion Detection

In order to activate motion detection, click the **Activate** button located at the top of the **Motion Detector** tab. When motion detection is successfully enabled, the red **X** in the **Motion Detector** tab will turn to a green check mark:



The box in the center of the **Motion Detector** tab will begin updating with the output of the camera selected in the **Source Selection** box.

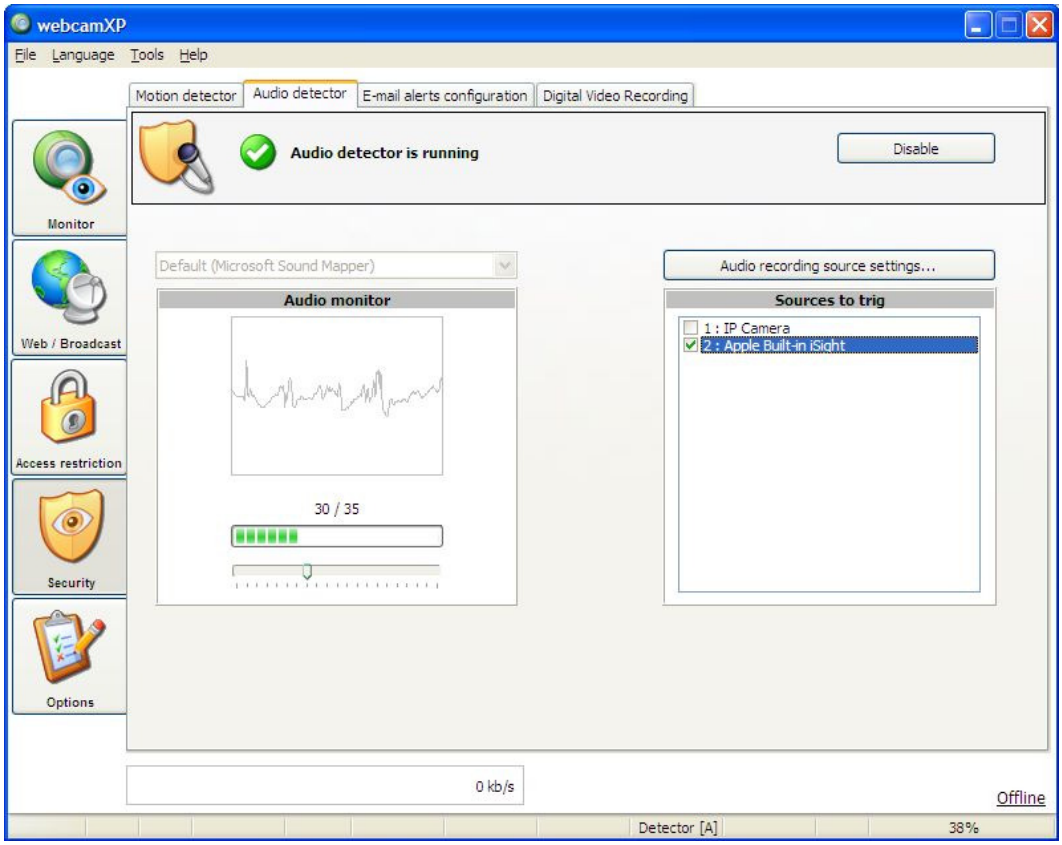
7.2 The Audio Detector

PRO VERSION

The audio detector is designed to trip an event whenever an audio signal, taken in from the network or USB microphone connected to webcamXP picks up a signal over a certain threshold.

To enable the Audio Detector, navigate to the **Audio Detector** tab of the **Security** section.

First, specify all the applicable options (see sections below). When all applicable options are specified, click the **Activate** button. Once activated, the red **X** icon will turn to a green check mark:

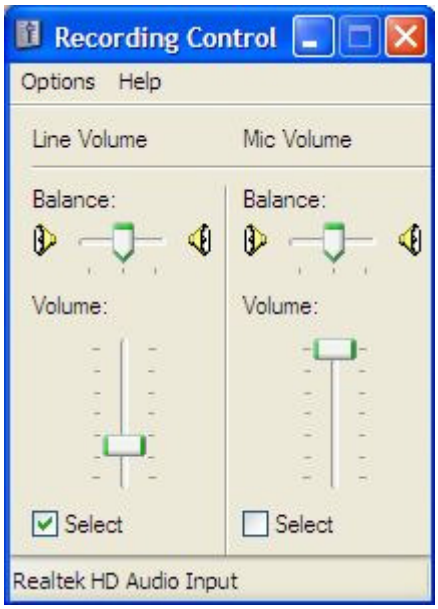


7.2.1 Specifying an Audio Device

To begin specifying your Audio Detector settings, you must first specify which audio device you wish monitored. When you first navigate to the **Audio Detector** tab of the **Security** section, the **Sources to trig** box will have listed in it all the audio sources available to your installation of webcamXP. To enable an audio source as a listening target, simply place a check mark next to its entry. In the previous screenshot, the **Apple Built-In iSight** camera has a built-in microphone. The check placed next to its entry indicates that it will be used as an audio source or the audio detector.

Once an audio source device is selected, a driver must be selected to control device behavior. All available drivers for selected devices are listed in the drop-down box directly on top of the line graph box. Select the applicable (and desired) driver from the drop-down box.

To customize the settings for your audio source, click the **Audio Source Settings** button. The following standard Windows window will appear:



From this window, you can specify the level of **Line Volume** (the amplitude of the data coming to webcamXP from the Microphone itself and the **Mic Volume** (the amplitude of the data being registered in webcamXP from the connected camera). You may also use the slider bars located above each volume option specify a speaker bias. For example, a slider to the left will cause the sound to appear as if they are only coming from the left-hand speaker.

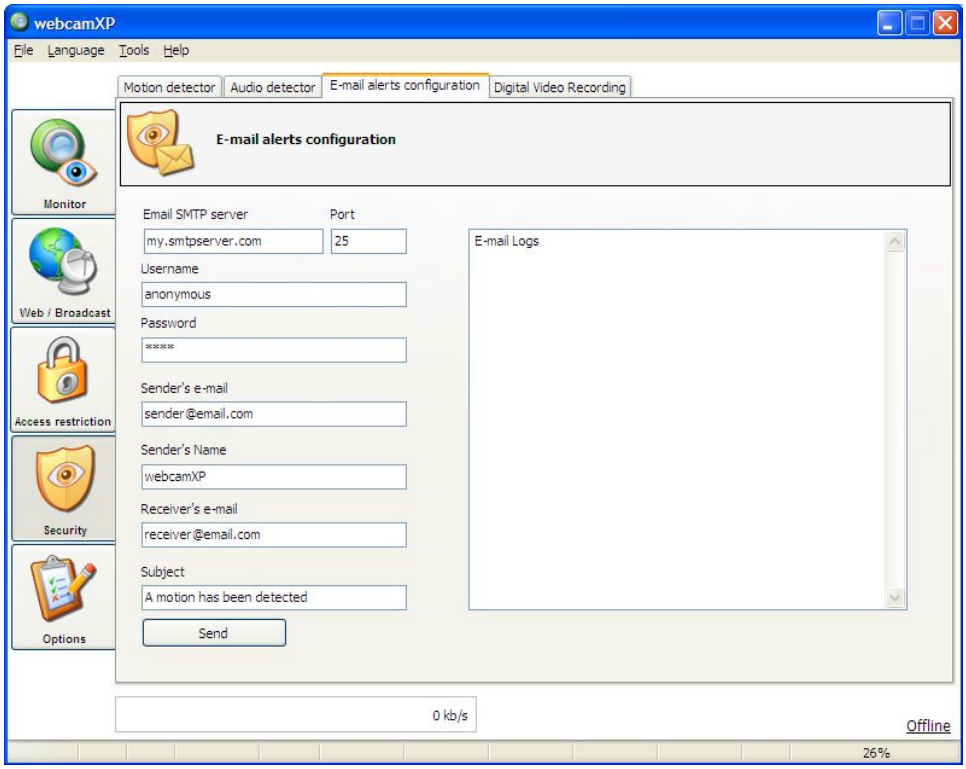
7.2.2 Specifying an Audio Threshold

Located to the left of the **Audio Detector** tab is a line graph box containing a progress bar and a slider bar. The slider bar is designed to allow you complete control over the detector's sensitivities. The higher the bar, the more sensitive the audio detector will be, and thus the more events it will trigger. The lower the bar, the less sensitive the audio detector is created.

To specify a threshold, simply move the slider to the left or right until the correct sensitivity is selected. If you wish to test sensitivity as you go, begin by enabling audio detection. The strength of the audio signal at any given time is shown in a line graph (shown in the screenshot above). As you move the slider, the sensitivity of the detector is automatically altered, causing a noticeable difference in the behavior of the line graph.

7.3 Email Alerts Configuration

Email alerts are sent to you whenever an enabled detector (e.g. camera motion detectors or audio detectors) discover an anomaly and trip an event. Email configurations are enabled in the **Motion Detector** tab. To dictate where and to whom email alerts are sent, navigate to the **Email Alerts Configuration** tab of the **Security** section. The tab contents are shown below:



You must specify the following options for email alerts to be configured properly:

- **Email SMTP Server** and **Port:** Enter into these textboxes the URL of the SMTP (outgoing) mail server you wish to use and the port on which to connect to it.
- **Username:** Enter your STMP (outgoing) mail username into this textbox.
- **Password:** Enter the password to your SMTP (outgoing) mail username into this textbox.
- **Sender's Email:** Enter into this textbox an email address to use as the sender of all your email alert emails. Entering something meaningful in this textbox can help you organize your alert email when they arrive in your inbox.
- **Sender's Name:** Enter a name for the person you wish your email alerts to originate from. As with the **Sender's Email**, the **Sender's Name** can help you organize your alert emails in your inbox.
- **Subject:** Enter into this textbox a subject for your email alert emails.

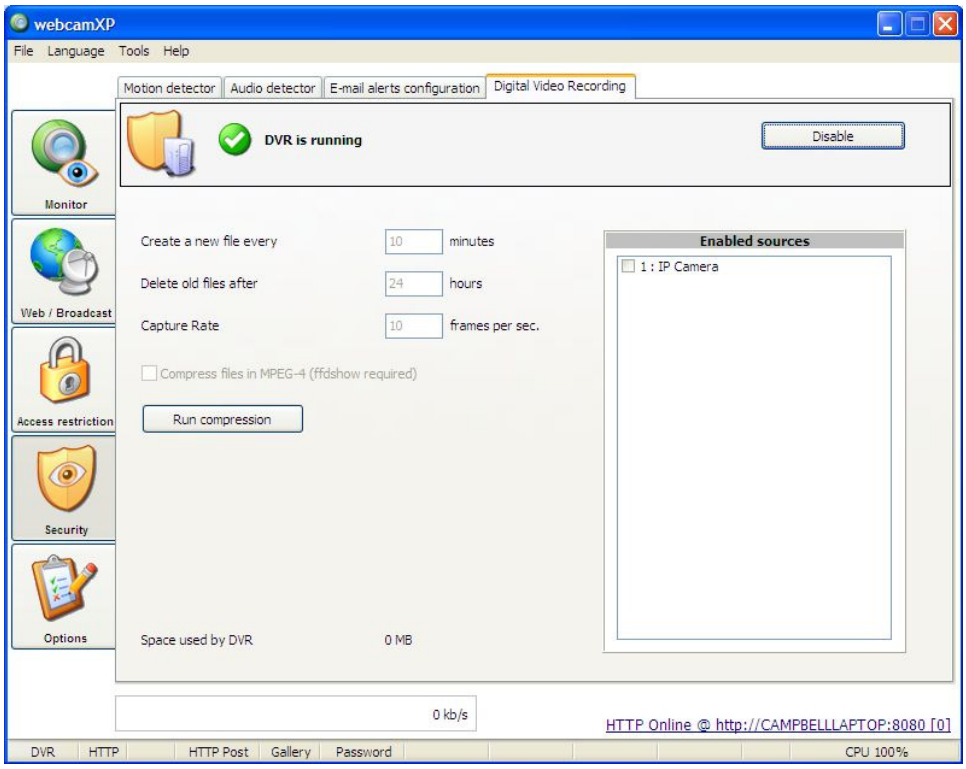
Once the above-mentioned options are specified, enter an email message in the large textbox located on the right-hand side of the **Email Alerts Configuration** tab. To perform a test-send of an email alert, click the **Send** button.

7.4 Digital Video Recording

PRO VERSION

Digital Video Recording (or DVR) allows you to automatically take video footage of camera output (usually schedule to be performed at regular intervals). To specify the options necessary to run Digital Video Recording, click the **Digital Video Recorder** tab in the **Security** section.

To begin regular **Digital Video Recording**, click the **Activate** button. The red **X** icon will turn to a green check mark:



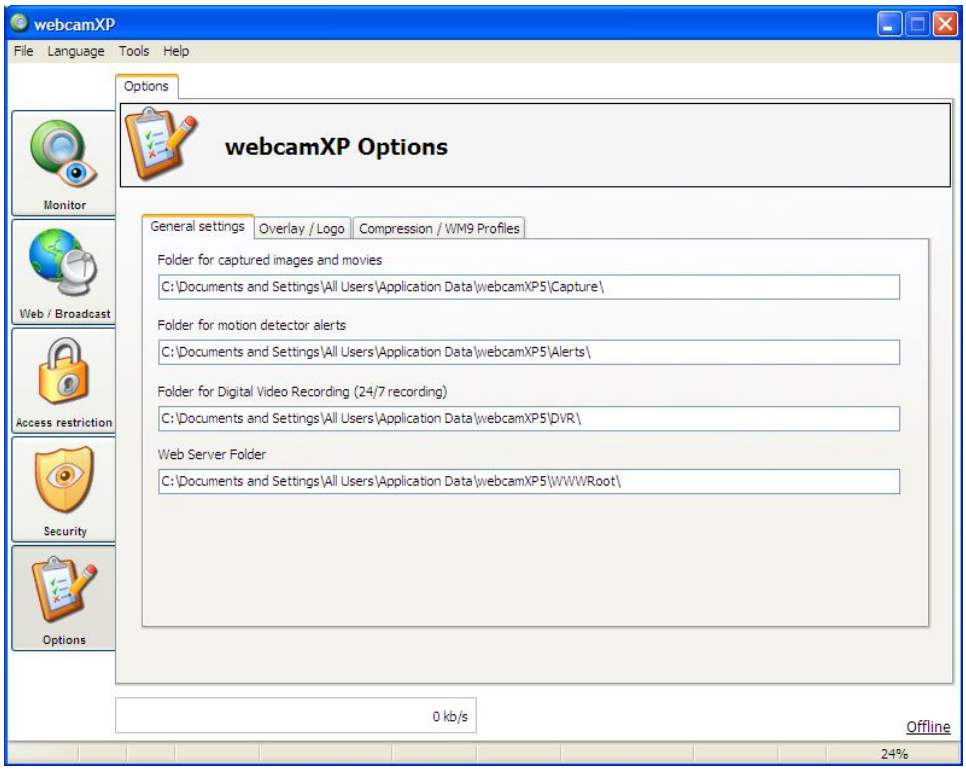
Select the cameras you wish to capture video from by placing applicable checkmarks in the **Enabled sources** list. Also, specify the following two options:

- **Create a file every:** Enter into this textbox the number of minutes you wish **Digital Video Recording** to wait between times of taking video recordings of your camera output.
- **Delete Old Files After:** Enter into this textbox the life span of any given movie. After that movie file has lived through its lifespan, the movie is deleted. Tner a number of hours for webcamXP to wait in the **Delete Old Files After** textbox.
- **Capture Rate:** Enter the number of frames you wish the camera to capture per second. The number of frames per second determines the smoothness of the animation (the larger number of frames per seond, the smoother the animation).
- **Compress files in MPEG-4 (FFDshow required):** Check this option if you wish your output movie to be compressed using the MPEG-4 codec. This option requires that FFDshow be installed.

8 Customizing webcamXP with Options

8.1 General Settings

To set webcamXP settings, navigate to the **Options** section. The default tab within the **Options** section, the **General Settings** tab is shown below:



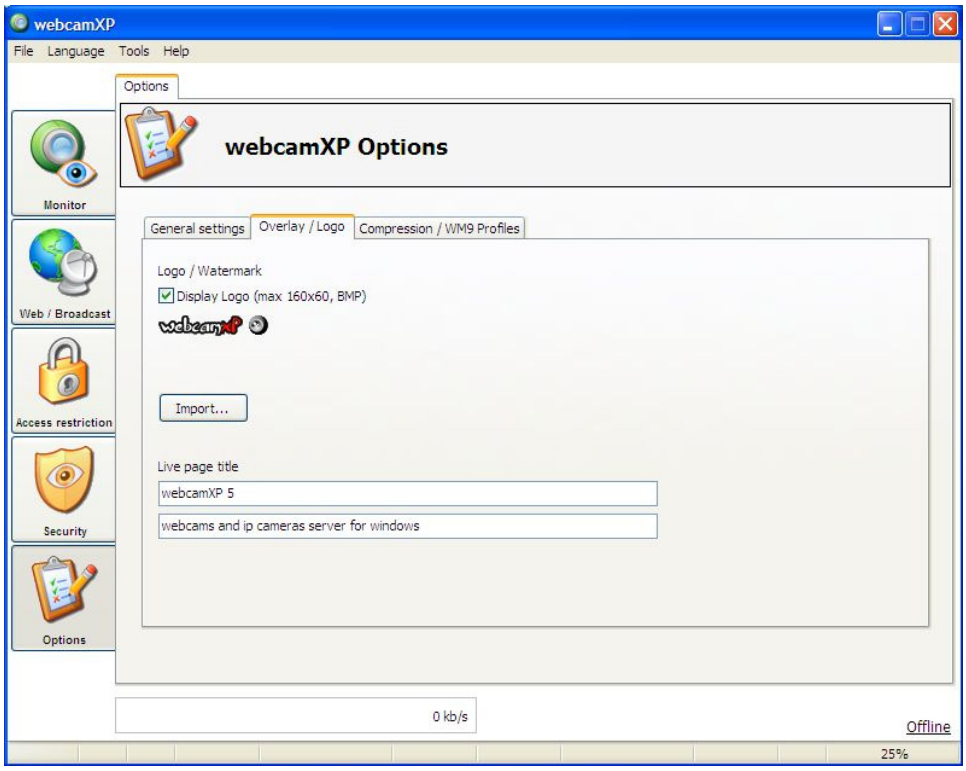
You may specify the following options:

- **Folder for captured images and movies:** Enter into this text box the directory you wish webcamXP to save all captured still images (in .JPG format) and all captured movie clips (in .MPG format).
- **Folder for motion detector alerts:** Whenever a motion detector is tripped indicating a point of attention, a file detailing the incident is saved to your hard drive. Enter into this text box the directory you want webcamXP to use when saving these incident reports.
- **Folder for Digital Video Recording (24/7 recording):** Enter into this textbox the directory you would like webcamXP to use when recording video from your cameras 24/7 (for use in surveillance).
- **Web Server Folder:** Enter into this textbox the directory you would like webcamXP to use when creating the HTML files for HTTP Broadcasting (the web page files users who navigate to your computer will see).

8.2 Logo / Page title Settings

PRIVATE/PRO VERSION

The webcamXP Overlay and Logo Settings tab is shown below:

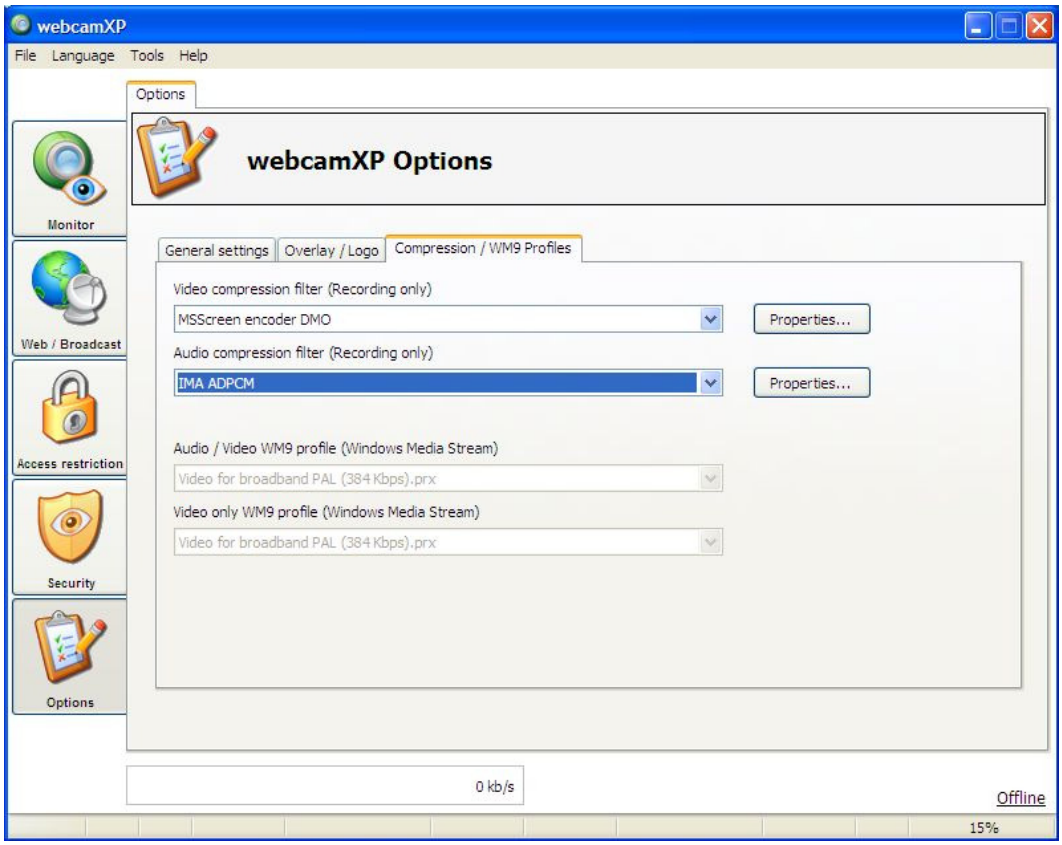


You may specify the following options:

- **Display Logo (max 160x60, BMP):** Check this box if you want webcamXP to display a logo in the upper left-hand corner of your cameras' images. By default, webcamXP displays the webcamXP logo on camera images.
- **Import...**: Click this button to import a custom logo (see the **Display Logo...** option above). Once clicked, you will be presented with an Open dialog box. Navigate to and select your logo file. Click the **Open** button. **Note:** for the logo to appear on your cameras' images, make sure the **Display Logo** checkbox is checked.
- **Live Page title**: Enter into these textboxes the title (and subtitle) you wish to use for your HTML page when HTTP Broadcasting. Users who navigate to your computer will see this title and subtitle as an identifying mark.

8.3 Compression and Encoding Settings

The **Compression / WM9 Profiles** tab is shown below:



You may set the following options:

- **Video Compression filter:** select from this drop-down box the type of compression (e.g. the file format) you wish to use when taking recordings from your cameras (e.g. when you click the **Record** button in the **Live View / Selection Source / Controls** tab). For this option, you can click the **Properties** button to specify filter-specific options.

- **Audio Compression filter:** select from this drop-down box the type of compression (e.g. the file format) you wish to use when recording audio (along with the video) from your cameras. For this option, you can click the **Properties** button to specify filter-specific options.

- **Audio / Video WM9 Profile:** This feature, as well as the **Video only WM9 Profile** option, is only applicable to the Windows Media mode of webcamXP. The value selected from the **Audio / Video WM9 Profile** drop-down box defines the quality and bandwidth allocation for streaming data using Windows media format. Multiple profiles are available to webcamXP out of the box.

- **Video only WM9 Profile**: This option is similar to the **Audio / Video WM9 Profile** option. It defines the quality and bandwidth allocation for streaming video **only** using Windows Media Streaming.

Note: You can use the **Windows Media Profile Editor** to modify existing or create additional WM9 profiles. Profiles are located in the **WM9Profiles** subdirectory of your webcamXP installation directory.

8.4 Selecting a Language for webcamXP

webcamXP can be translated into multiple languages. By default, webcamXP is published in English. To change your language, simply select your language from the **Language** menu bar:

You may select from the following languages:

- French
- German
- Italian
- Portuguese
- Spanish

Note: You can receive a free webcamXP PRO license if you assist translation efforts by translating webcamXP into your native language. Simply contact the webcamXP support team. They will provide you with a license and the translation tool. The translation tool is a straight-forward piece of software that will allow you to easily translate webcamXP into your native language.

9 webcamXP Administration

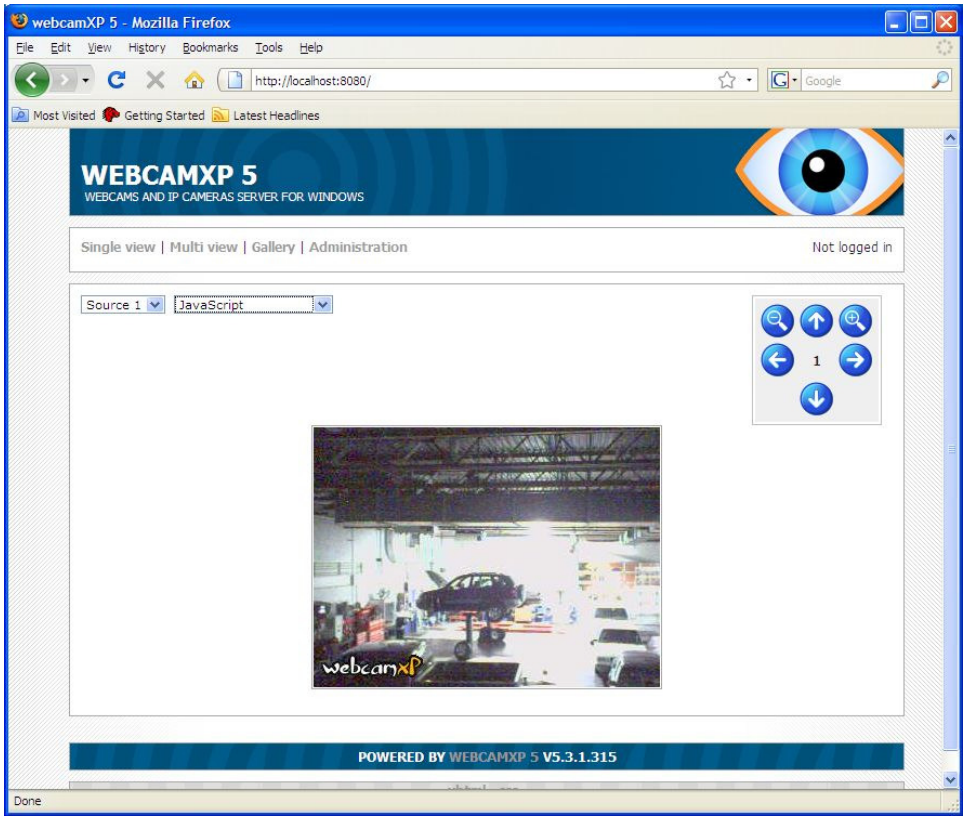
It is important to keep webcamXP fully licensed and up-to-date. Failure to do so can cause webcamXP to function improperly or fail.

The following two sections describe how to register webcamXP and how to update webcamXP.

9.1 Remote Administration

When HTTP Broadcasting is enabled, webcamXP can be administered over a web interface. To test your administrative web interface, open a web browser (e.g. Microsoft Internet Explorer or Mozilla Firefox) and navigate to http://localhost:[port], where [port] is the port number you specified when configuring HTTP Broadcasting. If you did not specify a custom port when configuring HTTP Broadcasting, navigate to http://localhost:8080.

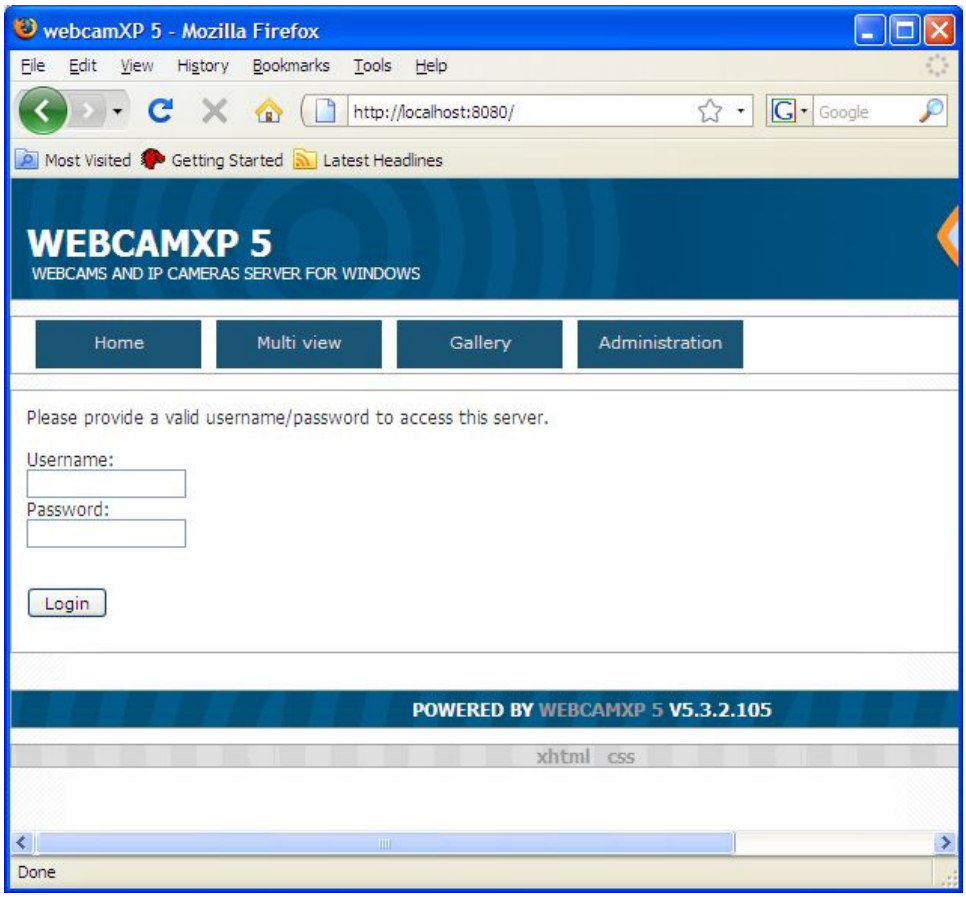
The following page will display:



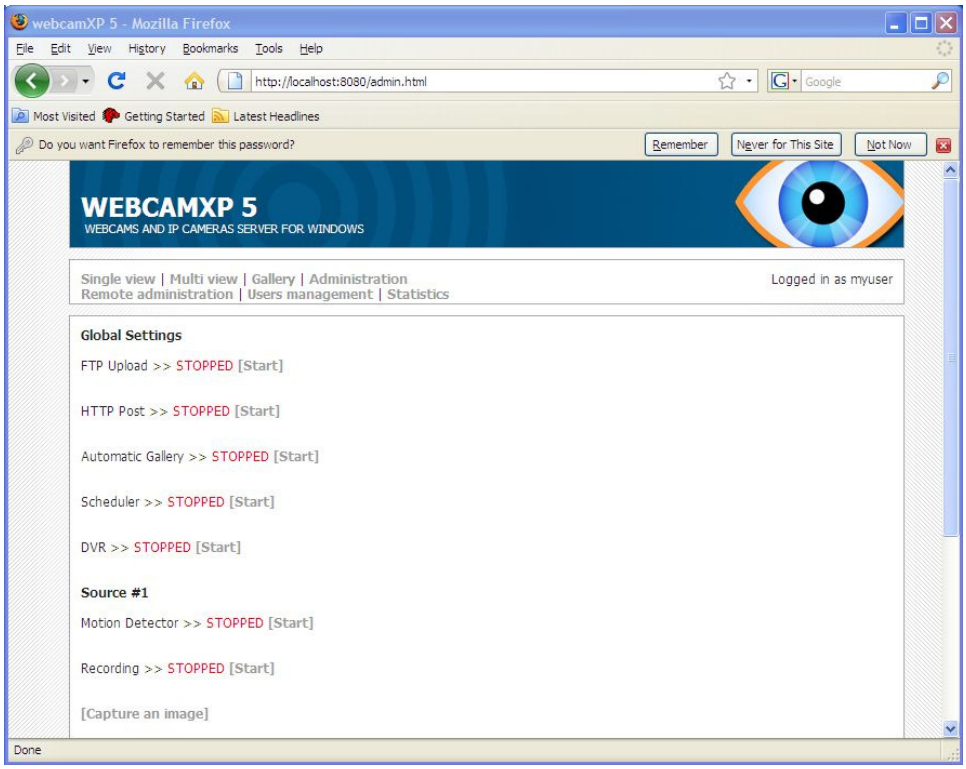
Click on the **Administration** link, located on the top bar of the page.

In order for remote administration to be available, a user account must be generated in the **Security** section of webcamXP. The user account must be given a username and password and must be given administrative privileges.

The following login page will appear:



You will be required to log in to an administrative account in order to gain access to remote administrative functions. Once a correct username and password have been entered, the following screen will appear:


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/admin.html
Most Visited Getting Started Latest Headlines
Do you want Firefox to remember this password?
Remember
Never for This Site
Not Now
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Remote administration | Users management | Statistics
Logged in as myuser
Global Settings
FTP Upload >> STOPPED [Start]
HTTP Post >> STOPPED [Start]
Automatic Gallery >> STOPPED [Start]
Scheduler >> STOPPED [Start]
DVR >> STOPPED [Start]
Source #1
Motion Detector >> STOPPED [Start]
Recording >> STOPPED [Start]
[Capture an image]
Done

A set of **General Settings** and camera-specific (source-specific) settings will be listed in the remote administration page.

The following sections describe the administrative functions you can perform using the remote administration page (shown above).

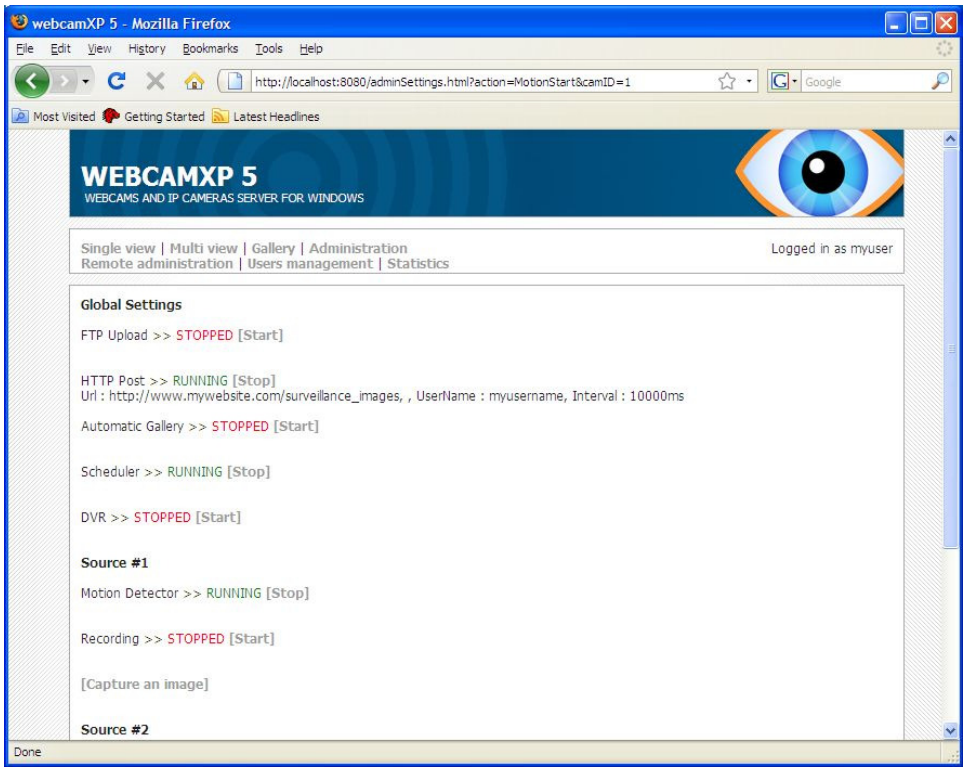
9.2 Starting and Stopping Services

Immediately visible when you log in to the remote administration page are a list of services and utilities. In the above example, none of the services are enabled (and therefore, none of them are running). As an administrator, you have the right to start and stop services.

When a service is started, it will use the options and settings configured and saved by webcamXP on the webcamXP host computer.

To begin a service, simply click the **[Start]** link to the right of the service's name. Some services, like **Motion Detector** or **Recording**, are source-specific. These services are listed under source names (in the above example, **Source #1**.

When a service has been successfully started, the red **STOPPED** flag will change:


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/adminSettings.html?action=MotionStart&camID=1
Most Visited Getting Started Latest Headlines
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Remote administration | Users management | Statistics
Logged in as myuser
Global Settings
FTP Upload >> STOPPED [Start]
HTTP Post >> RUNNING [Stop]
Url : http://www.mywebsite.com/surveillance_images, , UserName : myusername, Interval : 10000ms
Automatic Gallery >> STOPPED [Start]
Scheduler >> RUNNING [Stop]
DVR >> STOPPED [Start]
Source #1
Motion Detector >> RUNNING [Stop]
Recording >> STOPPED [Start]
[Capture an image]
Source #2
Done

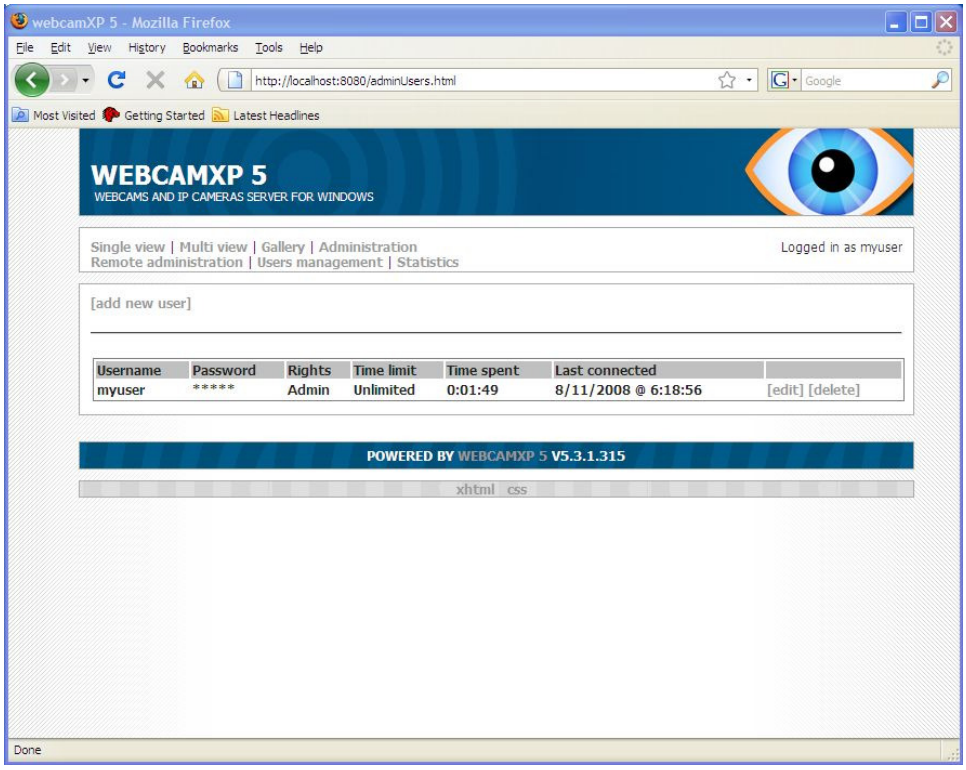
Additional information about the service (in the above example, the URL to which the HTTP Post service is posting files), will appear below the service's name in the list.

To disable a service, simply click the **[Stop]** link to the right of the service's entry in the list.

If you leave the above-described page and wish to return, simply click on the **Remote administration** link, located on the top-bar of the page.

9.3 Users Management

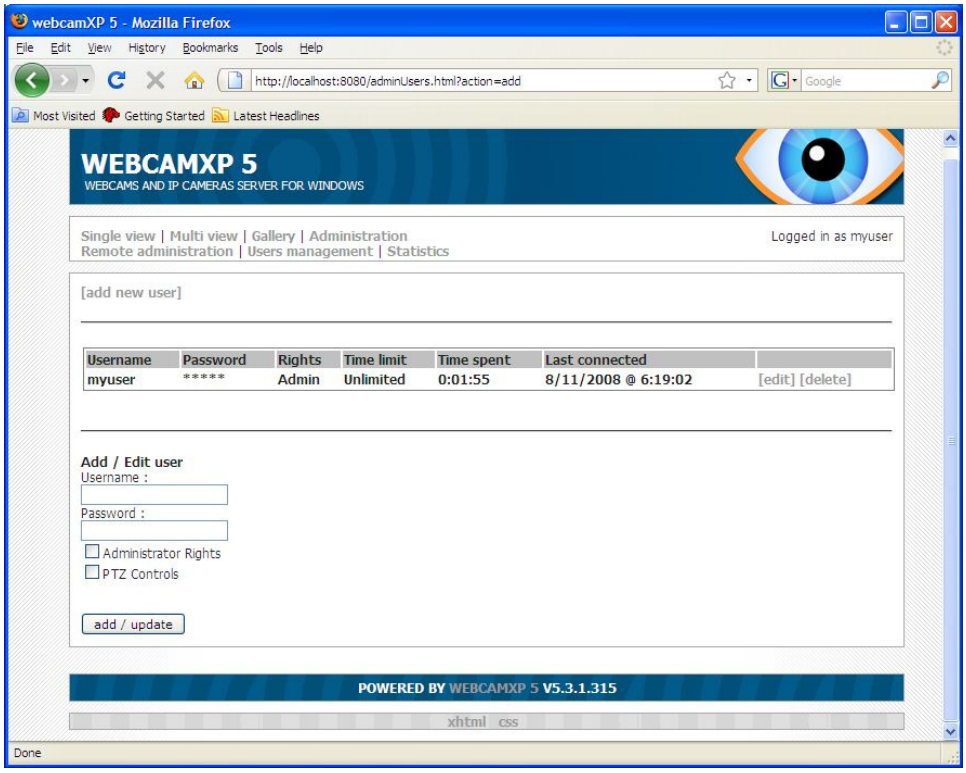
Administrators can also add, edit, and delete users from the remote administration page. To begin administrating users, click on the **Users management** link, located at the top of the **Administration** page. The following page will appear:


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/adminUsers.html
Most Visited Getting Started Latest Headlines
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Remote administration | Users management | Statistics
Logged in as myuser
[add new user]
Username Password Rights Time limit Time spent Last connected
myuser ***** Admin Unlimited 0:01:49 8/11/2008 @ 6:18:56 [edit] [delete]
POWERED BY WEBCAMXP 5 V5.3.1.315
xhtml css
Done

Initially, all user accounts will be listed. Along with the **Username**, the administrator status of the user and any time limits will be displayed.

9.4 Adding a New User

To add a new user, click on the **[add new user]** link from the **Users management** page. The following page will appear:


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/adminUsers.html?action=add
Most Visited Getting Started Latest Headlines
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Remote administration | Users management | Statistics
Logged in as myuser
[add new user]
Username Password Rights Time limit Time spent Last connected
myuser ***** Admin Unlimited 0:01:55 8/11/2008 @ 6:19:02 [edit] [delete]
Add / Edit user
Username :
Password :
Administrator Rights
PTZ Controls
add / update
POWERED BY WEBCAMXP 5 V5.3.1.315
xhtml css
Done

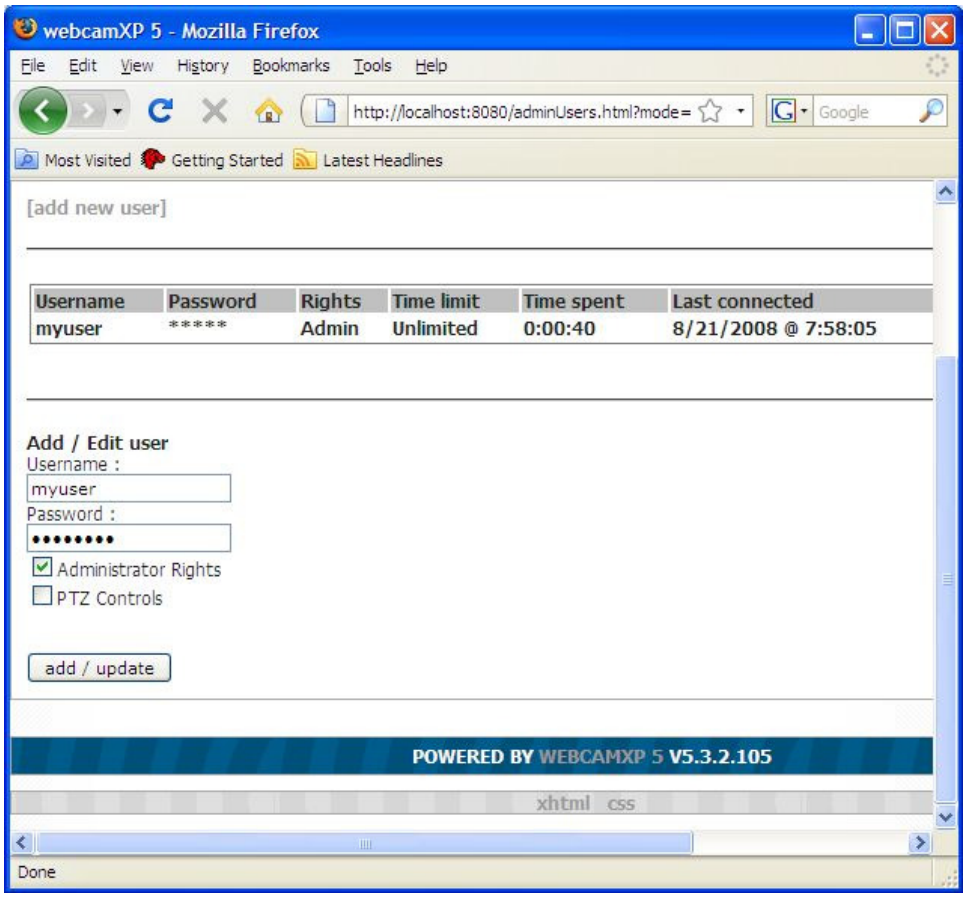
Enter the new user's username in the **Username** textbox and enter his or her password in the **Password** textbox. If you wish to make the user an administrator, check the **Administrator Rights** checkbox.

Click the **add / update** button to add the new user.

9.5 Editing an Existing User

To edit an existing user, click the **[edit]** button, located to the right of the user's entry in the **Users management** page.

The following page will appear:



Make all necessary changes to the user's information in the textboxes and checkboxes that appear.

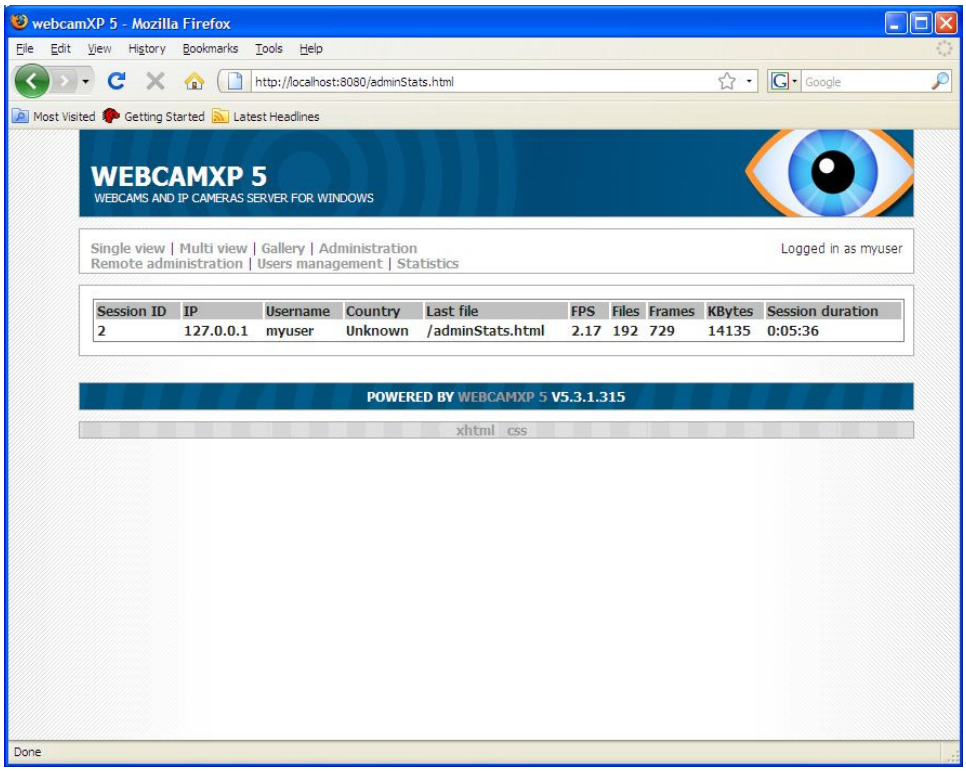
Click the **update** button to accept and finalize changes.

9.6 Deleting a User

To remove a user, simply click on the **[delete]** link, located to the right of the user's entry.

9.7 Statistics

The **Statistics** page provides information about viewership and traffic for your HTTP Broadcasting site. To view the **Statistics** page, simply click on the **Statistics** link from the **Administration** page. The following page will appear:


webcamXP 5 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost:8080/adminStats.html
Most Visited Getting Started Latest Headlines
WEBCAMXP 5
WEBCAMS AND IP CAMERAS SERVER FOR WINDOWS
Single view | Multi view | Gallery | Administration
Remote administration | Users management | Statistics
Logged in as myuser
Session ID IP Username Country Last file FPS Files Frames KBytes Session duration
2 127.0.0.1 myuser Unknown /adminStats.html 2.17 192 729 14135 0:05:36
POWERED BY WEBCAMXP 5 V5.3.1.315
xhtml css
Done

Each session (each visit by a user) will be displayed in the **Statistics** page. In the above example, the user **myuser**, who is an administrator, is the only person to have visited the HTTP Broadcast website. Listed with the user's name and a session ID (a unique integer identifying the session) are the user's IP address, country of origin (if known), the last web file he or she visited, the frames per second (FPS) the user experienced, the number of files he or she downloaded, the number of frames he or she viewed, the number of kilobytes he or she accessed, and the amount of time he or she spent on the HTTP Broadcast website. In the above example, **myuser** spent just over five and a half minutes on the HTTP Broadcast website and downloaded a total of 14 megabytes.

9.8 Registering webcamXP / Editing License Information

To register webcamXP, select **Register** from the **Help** menu. The following window will appear:

License information required
The product is currently not registered.
Please paste your license informations in this field to register the product :
webcamXP 2007 / 2008 license...
Cancel
Ok

Enter your license key in the textbox and click **OK**.

If your license key is in the format of WXP-xxxx-xxxx, your license pertains to a previous version of webcamXP. Click on the **webcamXP 2008 / 2008 license...** button.

The following window will appear:

License information required
Use this form if you own a webcamXP 2007 / 2008 license (WXP-xxx-xxx).
Activation required
Email (corresponding to your account on www.webcamxp.com) :
Username :
Serial number :
Cancel
Ok

Enter your email address in the **Email** textbox. Make sure the email you enter matches the email address you used to create your account on www.webcamxp.com.

Enter your account's username in the **Username** textbox and your account's password in the **Password** textbox. Click the **OK** button to retrieve the proper license information and complete registering webcamXP.

9.9 Using webcamXP Mobile

Many of the monitoring functions of webcamXP are also available for a Windows Mobile-enabled device.

To begin using the webcamXP mobile functionality, install the "webcamXP.Mobile.cab" file on your mobile device. Depending on the Windows Mobile version, installation procedures may differ. Consult your mobile device's instructional documentation for more information on installation.

Also, take a note of the domain name (URL) or IP Address of the computer running webcamXP, as well as the port used to connect to webcamXP and any usernames or passwords required. This information can be found in the **HTTP Broadcasting** tab of the **Web / Broadcast** section.

Once the "webcamXP.Mobile.cab" file has been installed on your mobile device, you will be able to run the application as shown below:

Enter your webcamXP machine's URL or IP Address and port information required for connection in the webcamXP Mobile interface. Enter the URL or IP Address in the **Host** textbox and the port in the **Port** box. Select the camera you wish to identify by selecting a number from the **Cam** drop-down box.

Click the green arrow to the right of the three inputs to begin viewing data from the selected camera.

If the camera requires authentication (a username or password), click the **Options** link at the bottom right of your PDA screen. The following menu will appear:

Select **Configuration Authentication**. The following screen will appear:

Enter your username in the **Username** textbox. Enter your password in the **Password** textbox. Click the **OK** button.

From the main window of your PDA application (shown below), you can control the positioning of the camera using the four arrow buttons:

The up and down arrow buttons control the tilt of the camera. The left and right buttons control the pan position of the camera. The plus and minus (**+** and **-**) buttons control the zoom of the camera.

Auto capture is also available to users of the webcamXP 5 for PocketPC. Auto capture allows you to automatically take screenshots of a selected camera's output. To enable auto capture, select the **File** menu on the button left of your PocketPC's screen. In the menu that appears (shown above), select **Auto Capture**. A check will appear to the left of the **Auto Capture** option, indicating auto capture is enabled.

Auto capture options are specified in webcamXP on the host machine (e.g. the machine owning the domain or IP address entered into the **Host** textbox).

Appendix A: Required Firewall and Anti-Virus Settings

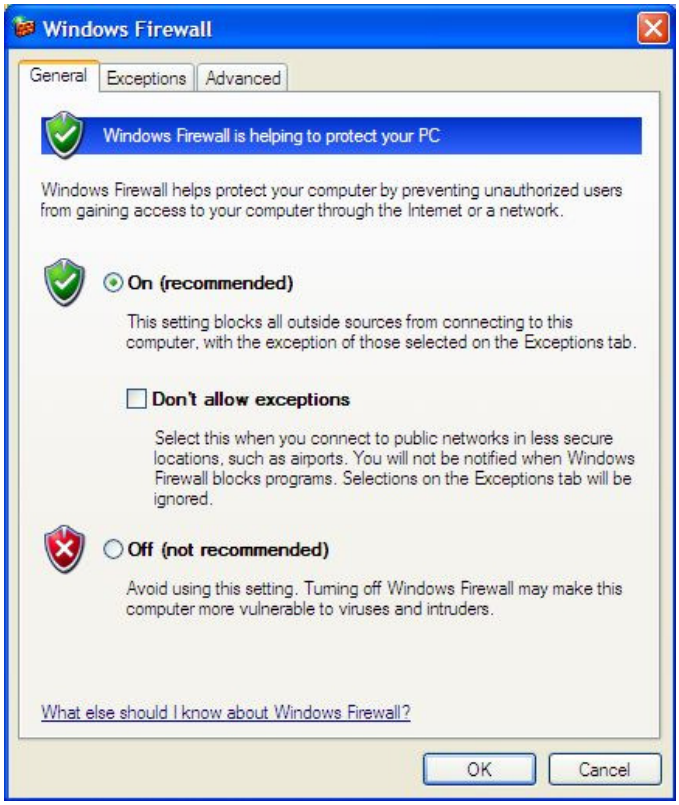
In order for your broadcasted website to display to users, the port used must be given an allowance in any and all firewall software. Firewall software is designed to block connections on specific ports, thus cutting off primary lines of attacks for hackers. Commonly, HTTP ports (by default port 8080) are blocked by firewall software, as HTTP ports left open on machines not running dedicated web hosting software can lead to security vulnerabilities.

If you specified a custom port in the Broadcast HTTP tab, you must unblock this port from your firewall software. If you did not specify a custom port, make sure that port 8080 is unblocked from your firewall software. Refer to your specific firewall software's instructions for additional information on unblocking ports.

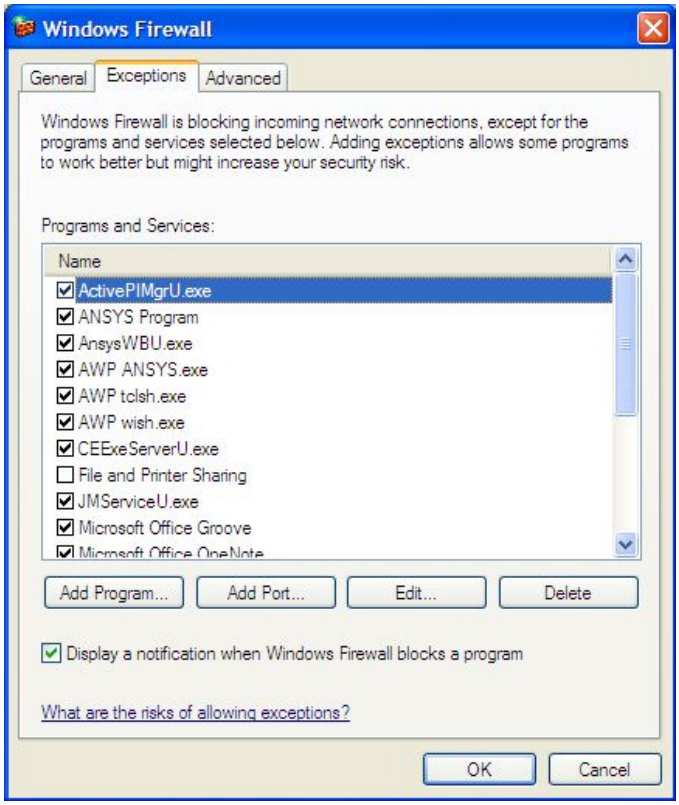
Microsoft provides a Windows Firewall service for many computers. Although this service is not enabled by default, it may be enabled on your computer without advertising its existence.

To make an allowance for webcamXP, open your Control Panel (select **Start > Settings > Control Panel**).

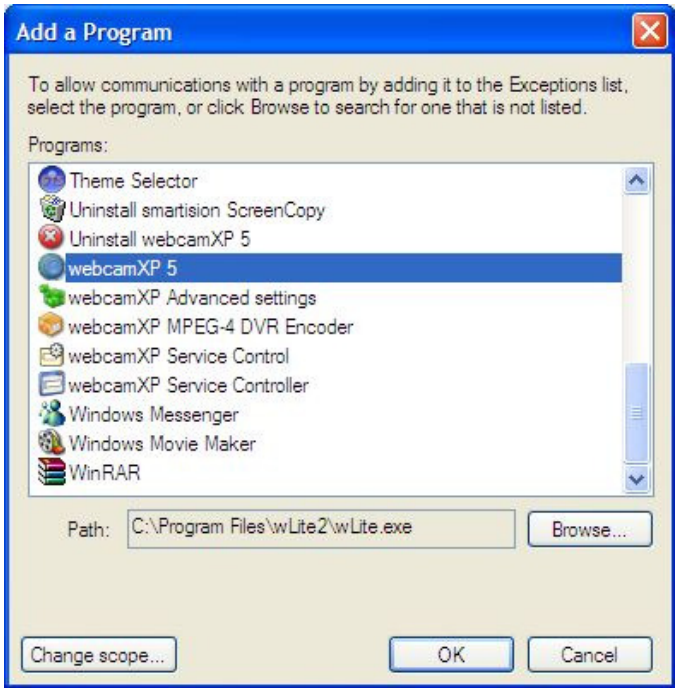
Double-click on the **Windows Firewall** icon. The following window will appear:


Windows Firewall
General
Exceptions
Advanced
Windows Firewall is helping to protect your PC
Windows Firewall helps protect your computer by preventing unauthorized users from gaining access to your computer through the Internet or a network.
On (recommended)
This setting blocks all outside sources from connecting to this computer, with the exception of those selected on the Exceptions tab.
Don't allow exceptions
Select this when you connect to public networks in less secure locations, such as airports. You will not be notified when Windows Firewall blocks programs. Selections on the Exceptions tab will be ignored.
Off (not recommended)
Avoid using this setting. Turning off Windows Firewall may make this computer more vulnerable to viruses and intruders.
What else should I know about Windows Firewall?
OK
Cancel

Click on the **Exceptions** tab. The following window will appear:



Click the **Add Program...** button. The following window will appear:



Select **webcamXP 5** from the list and click **OK**. Click **OK** in the **Windows Firewall** window to accept changes and add the exception.

Appendix B: Port forwarding

In order for webcamXP's output to be reachable or viewable over the Internet, it is required that all HTTP ports are enabled and unblocked in your network's router or modem. Also, the router must be configured to automatically route visitors to the computer running webcamXP. This process is called **Port Forwarding**.

Port Forwarding methods differ by router manufacturer and model. A good tutorial on **Port Forwarding** can be found on http://www.portforward.com. Visit the following URL for an introductory tutorial on enabling **Port Forwarding** on your router hardware:

http://www.portforward.com/english/routers/port_forwarding/routerindex.htm

Select your router from the page that appears. Select **webcamXP**, and then follow the steps presented in the tutorial. Make sure that your system is connected to your router using a static IP address. For information on setting a static IP address, consult your router's help documentation or contact your router manufacturer's customer service.

Appendix C: Setting up a Dynamic Domain Name Service

You may wish to set up a domain name (e.g. www.mywebsite.com). There are various Domain Name Registration services. A simple Internet search will yield many possibilities. Domain Names (unless they are for registered non-profit organizations), cost a monthly or yearly price to register and maintain.

The easiest service to use is www.dyndns.org. It is free and compatible with webcamXP

When you first visit www.dyndns.org, select **DNS Hosting**, and then click **Add DNS Hosting**. You will be required to create an account with dyndns.org. From this account, follow dyndns.org online instructions on setting up your new domain and tieing it to your computer's static IP address.

Once you have configured your dynamic name, turn off HTTP Broadcasting, replace the IP Address in the **Host Name** field with your newly-created domain name (e.g. example.dyndns.org), and then turn HTTP Broadcasting on. All the code generated by webcamXP (including dynamic links) will be updated to use the new domain name.

There are free tools that keep the dynamic name always aligned with your current IP (for users who have dynamic IPaddresses). It is suggested to investigate such a service, as dynamic IP Addresses can cause down-time and domain name failures.

Appendix D: Controlling webcamXP from an External Application

webcamXP can be controlled and utilized from a custom, third-party website. There are two methods to doing so.

The first, **HTTP**, is rather straight-forward. It utilizes the HTTP Get functionality of the files hosted in webcamXP's remote administration.

For a list of the available commands, please read the section titled **Remote Administration.**

To utilize these files, simply create a website that links to a desired file and passes it a series of parameters. For more information on the parameters, navigate through the remote administration system hosted by webcamXP. Every time you encounter an action you wish to emulate using an external website, make note of the URL. All applicable parameters (including "cmd" and "camID") will be displayed in the URL.

The following URLs are example URLs that can be used to control webcamXP from an external web page:

http://www.mywebsite.com/adminSettings.html?action=HTTPPostStart

http://www.mywebsite.com/adminSettings.html?action=Capture&camID=3

The first of the above URLs contacts webcamXP and informs it to begin an HTTP post operation (posting a captured camera image to an HTML page). The second captures an image from camera 1 and stores it on the hard drive of the machine running webcamXP.

Appendix E: Controlling webcamXP by Windows Messaging

webcamXP can also be controlled by means of Windows messaging. Windows messaging can be accomplished using Visual C++ or C by calling the Windows 32 API function SendMessage(). To control webcamXP, an integer value should be sent to webcamXP. The integer number corresponds to an option.

The table below shows the available commands and their integer value equivalents. Each command is based on the WM_USER variable, valued 1024:

Command Name	**Command Value**
WM_USER	**1024**
WM_RECONNECT	**WM_USER+3099**
WM_CONNECT	**WM_USER+3100**
WM_DISCONNECT	**WM_USER+3101**
WM_CONNECT_AUDIO	**WM_USER+3102**
WM_DISCONNECT_AUDIO	**WM_USER+3103**
WM_AUDIO_INPUT	**WM_USER+3104**
WM_RECORDSTARTMOTION	**WM_USER+3149**
WM_RECORDSTART	**WM_USER+3150**
WM_RECORDSTOP	**WM_USER+3151**
WM_CAPTURE	**WM_USER+3152**
WM_MOTIONSTART	**WM_USER+3153**
WM_MOTIONSTOP	**WM_USER+3154**
WM_WWWSTART	**WM_USER+3155**
WM_WWWSTOP	**WM_USER+3156**
WM_FTPSTART	**WM_USER+3157**
WM_FTPSTOP	**WM_USER+3158**
WM_HTTPSTART	**WM_USER+3159**
WM_HTTPSTOP	**WM_USER+3160**
WM_DVRSTART	**WM_USER+3161**
WM_DVRSTOP	**WM_USER+3162**
WM_GALLERYSTART	**WM_USER+3163**
WM_GALLERYSTOP	**WM_USER+3164**
WM_SCHEDULERSTART	**WM_USER+3165**
WM_SCHEDULERSTOP	**WM_USER+3166**

WM_MOTIONPICTURE	**WM_USER+3204**
WM_MOTIONALERT	**WM_USER+3205**
WM_MOTIONFTP	**WM_USER+3206**
WM_MOTIONHTTPPOST	**WM_USER+3207**
WM_MOTIONEMAIL	**WM_USER+3208**
WM_SENDSMS	**WM_USER+3209**
WM_ADDGALLERY	**WM_USER+3210**
WM_SENDWINMSG	**WM_USER+3211**
WM_REFRESHOVERLAYFORM	**WM_USER+3501**
WM_CLEANEXIT	**WM_USER+3701**

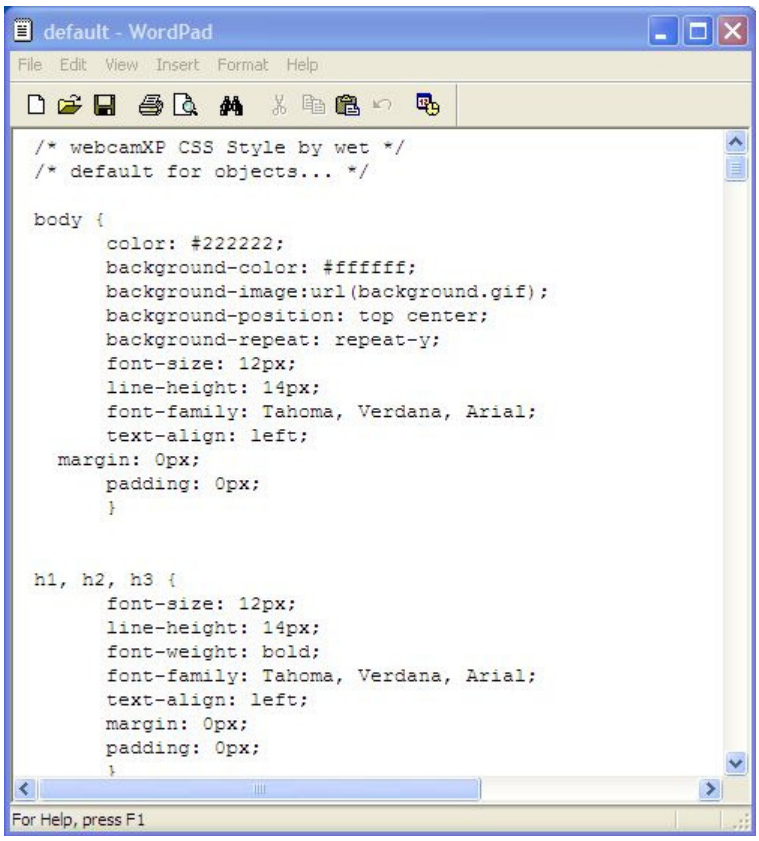
Note: webcamXP allows for easy integration with Power-Home, a home scripting and macro application. For more information on integrating your webcamXP-controlled cameras with a Power-Home system, please visit the following tutorial:

http://www.power-home/com/forum/forum_posts.asp?TID=1830&PN=1

Appendix F: Customizing Your Page's Look and Feel (Using CSS)

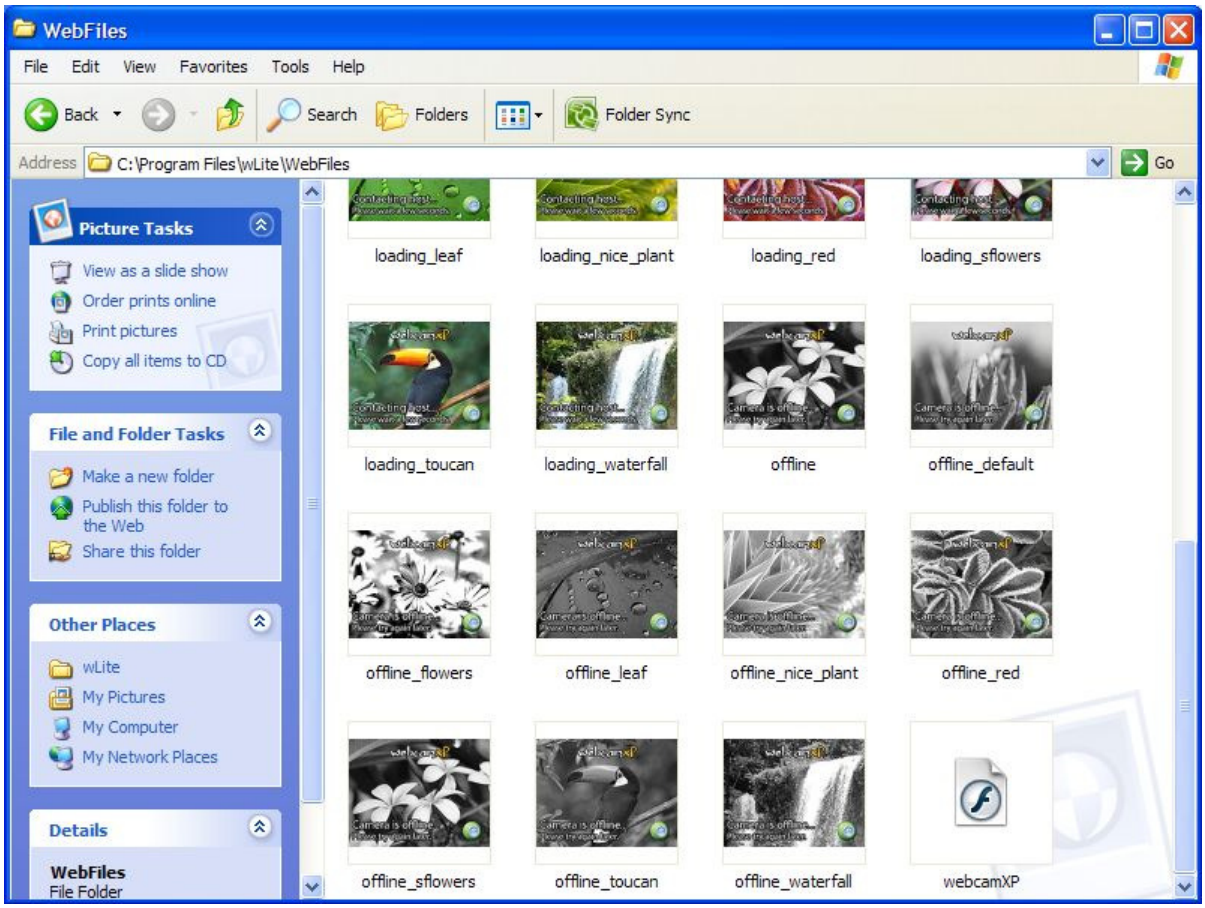
The default HTTP Broadcast page uses a default Crystal Stylesheet (CSS). If you wish to edit the CSS manually, you can do so by locating the file "default.css." "default.css" is located in the WebFiles\CSS_Styles folder of your webcamXP installation file (by default, C:\Program Files\wLite).

The "default.css" file can be easily edited using Microsoft Wordpad (as shown below):



When you have made the necessary changes to the CSS file, save it and refresh the page in your browser.

Note: webcamXP will utilize default images for "loading" screens and "offline" notifications. webcamXP does come complete with a library of alternate images, however. The images are located in the "WebFiles" directory of your webcamXP installation directory:



To change the default image for the offline notification, simply rename "offline.jpg" to "offlineprevious.jpg" and rename the image of your choice to "offline.jpg." To change the default image for the loading notification, rename "loading.jpg" to "loadingprevious.jpg" and rename the image of your choice to "loadingprevious.jpg."

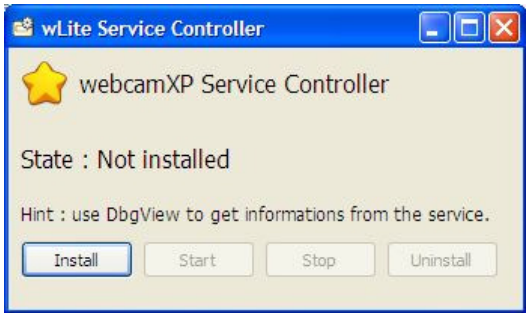
You can specify a custom image (one not included in the library) as long as the image is 320 pixels x 240 pixels in size. Simply copy your custom image to the "WebFiles" directory of your webcamXP installation directory and rename the new file to either "loading.jpg" or "offline.jpg."

Appendix G: Setting up webcamXP as a Windows Service

As a Windows service, webcamXP can run in the background of most Microsoft Windows processes. While running, webcamXP can perform its normal duties of handling events thrown by detectors, monitoring camera output, and saving screenshots and movies.

To set up webcamXP as a Window service, select the **webcamXP Service controller** icon from your webcamXP start menu.

The following window will appear:



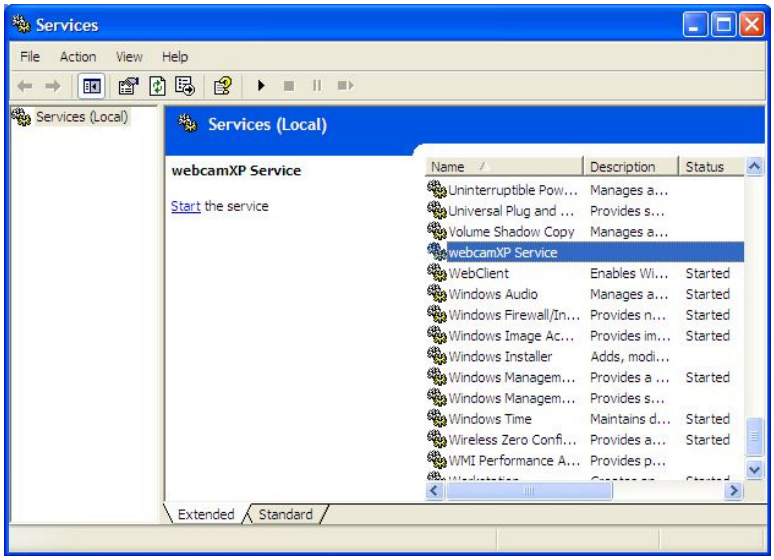
Click the **Install** button to install webcamXP as a service.

When the option becomes available, click the **Start** button to begin the service working.

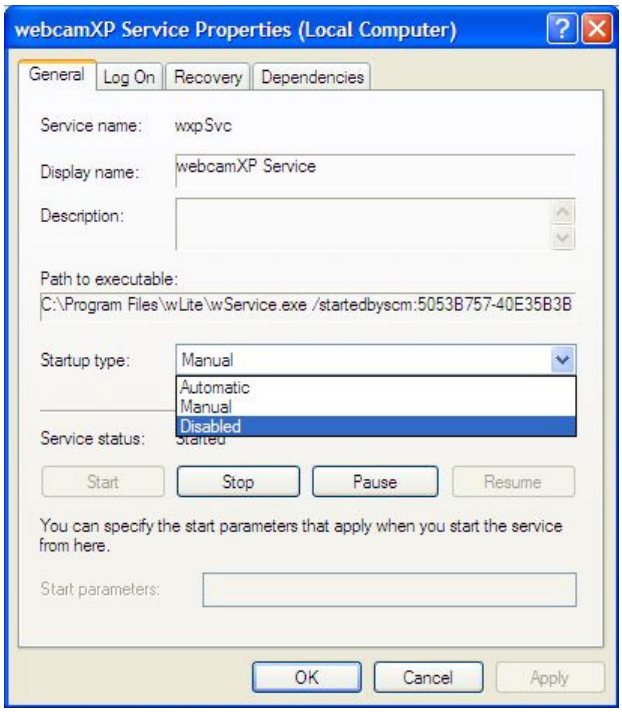
The webcamXP service will run while Windows is booted. Once the computer is shut down, the service will close and must be manually restarted. You can specify the service to start automatically using the **Services** option of the **Administrative Tools** Control Panel.

Select **Start > Settings > Control Panel**. Double-click on the **Administrative Tools** icon. Double-click on the **Services** icon.

The following window will appear:



If you successfully installed the webcamXP service, it will appear in the **Services (local)** list (as highlighted above). Select the **webcamXP Service** entry and select **Properties** from the **Action** menu. The following properties page will appear:



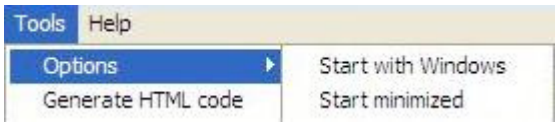
Select **Automatic** from the **Startup Type** drop-down box. Click **OK** to save changes.

Appendix H: Starting webcamXP When Windows Loads

There are two methods for automatically starting and executing webcamXP. The first, described in **Appendix G**, is to run webcamXP as a Windows Service. When run as a service, webcamXP will begin even when no user is logged into Windows. Windows services is perfect for dedicated servers that must run webcamXP regardless of the connected users.

The second method is to add webcamXP to the Windows startup group. This method runs webcamXP when a specific user boots up the machine and successfully logs in.

To add webcamXP to the Windows startup group, simply select **Tools > Options > Start with Windows**:



Appendix I: Keeping webcamXP Up to Date

In order to update webcamXP, select **Check for Updates** from the **Tools** drop-down menu. The following window will appear: Click the **Check for update** button. webcamXP will contact its parent server and check for upgrades. The upgrades will be listed in the list box.

Select the first update from the list and click the **Install update** button. The two status bars at the bottom of the window will progress until installation is complete.

Move on to the next installation. Repeat this process for all suggested updates.

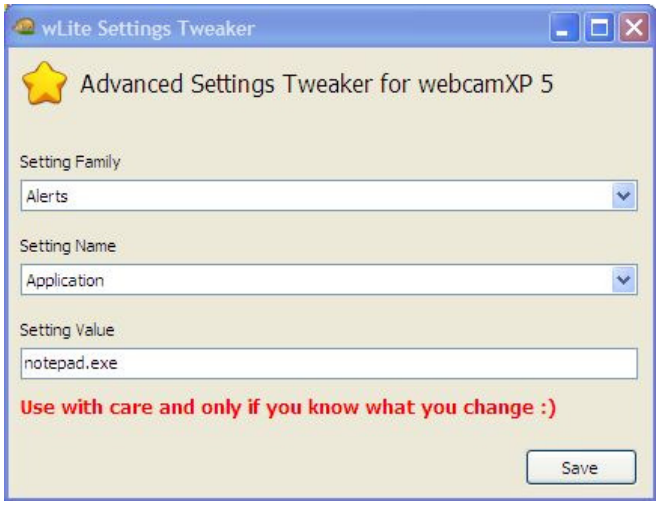
When updates are completed installing, click the **Restart webcamXP...** button to close webcamXP and reload it with the new updates applied.

Appendix J: Making Changes using the Advanced Settings Editor

The **Advanced Editor** allows you to easily specify complex, fundamental options of webcamXP without editing code or messing with complicated configuration files.

To open the **Advanced Editor**, open Microsoft Windows Explorer and navigate to your webcamXP installation directory (standardly C:\Program Files\wLite).

Double-click on the **wTweaker** application. The user interface of the **wTweaker** application is shown below:



Select a type of setting from the **Setting Family** drop-down box. Setting types include options relating to alerts, to camera integration, and to saving of screenshots and movies.

Select the specific setting name from the **Setting Name** drop-down box.

Enter a value for the new setting in the **Setting Value** textbox.

WARNING: If you are unsure about absolute format for any specific option, **do not** specify it using the **Advanced Settings** tool.

If you are sure you wish to commit changes to the webcamXP program, click the **Save** button. You may have to re-start webcamXP for all changes to be successfully implemented.